1	REPORTER'S RECORD				
	VOLUME 4 OF 5 VOLUMES				
2	VOLUME 4 OF 3 VOLUMES				
2	SOAH DOCKET	NO.	582-05-1552		
3	TCEO DOCKET NOS. 1997-				
4	APPLICATIONS OF URI, INC.				
	TO)			
5	THE TEXAS COMMISSION ON)			
	ENVIRONMENTAL QUALITY)			
6)			
	FOR)			
7)			
	ISSUANCE OF A PRODUCTION)			
8	AREA AUTHORIZATION FOR)	OF		
	PRODUCTION AREA 3)			
9	UNDER TCEQ PERMIT UR02827)			
)			
10	AND)			
)			
11	RENEWAL OF TCEQ WASTE)			
	DISPOSAL WELL PERMIT)			
12	NOS. WDW-247 AND WDW-248)	ADMINISTRATIVE HEARINGS		
13					
14	******				
15			MERITS		
16	*******	* * * *	******		
17		C 7	2005 11 5 6 11 2 6 1		
18	On the 4th day of August, 2005, the following				
19	proceedings came on to be heard in the above-entitled				
20 21	and numbered cause before the Honorable Paul Keeper,				
22	Judge presiding, held in Kingsville, Kleberg County,				
23	Texas:	r+ ^ d	by machine shorthand.		
24	froceedings repo	ıtea	by machine shorthand.		
25					

		Page 2
1	APPEARANCES	
2		
	Mr. Jep Hill	
3	LAW OFFICE OF JEP HILL	
	P.O. Box 30254	
4	Austin, Texas 78755	
_	(512) 342-8888	
5 6	ATTORNEY FOR APPLICANT	
6	Mr. Don Redmond	
7	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY	
,	OFFICE OF LEGAL SERVICES	
8	12100 Park 35 Circle, Building A	
	Austin, Texas 78753	
9	(512) 239-0612	
10	Ms. Dawn Burton	
	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY	
11	OFFICE OF LEGAL SERVICES	
1.0	12100 Park 35 Circle, Building A	
12	Austin, Texas 78753	
13	(512) 239-0946 ATTORNEYS FOR THE EXECUTIVE DIRECTOR OF TCEQ	
14	ATTORNETS FOR THE EXECUTIVE DIRECTOR OF TOEQ	
	Ms. Christina Mann	
15	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY	
	OFFICE OF PUBLIC INTEREST COUNSEL	
16	12100 Park 35 Circle, Building F	
	Austin, Texas 78753	
17	(512) 239-4014	
	ATTORNEY FOR OFFICE OF PUBLIC INTEREST COUNSEL	
18		
19	Ms. Melanie Oberlin	
20	HENRY & POPLIN B 19 1/2 West 11th Street	
20	Austin, Texas 78701	
21	(512) 708-1549	
	ATTORNEY FOR PROTESTANTS	
22		
23		
24		
25		

		Page 3
1	INDEX	
	VOLUME 4	
2	HEARING ON MERITS	
3	August 4, 2005	
4	APPLICANT'S WITNESS	
	HAL P. DEMUTH	
5	Direct Examination by Mr. Hill	6
6	Cross-Examination by Ms. Oberlin	8
7	Cross-Examination by Mr. Redmond	25
8	Cross-Examination by Ms. Mann	27
9	Examination by The Court	30
10	Redirect Examination by Mr. Hill	34
11	Recross-Examination by Ms. Oberlin	38
12	Recross-Examination by Ms. Mann	41
13	EXECUTIVE DIRECTOR'S WITNESS	
	JOHN J. SANTOS, P.G.	
14	Direct Examination by Mr. Redmond	61
15	Cross-Examination by Mr. Hill	66
16	Cross-Examination by Ms. Oberlin	89
17	Cross-Examination by Ms. Mann	118
18	Examination by The Court	123
19	Executive Director rests	134
20	Recross-Examination by Ms. Oberlin	134
21	Recross-Examination by Mr. Hill	138
22	Adjournment	167
23	Court Reporter's Certificate	168
24		
25		

					Page 4
1		EXHIBIT INDEX			
2		CANT'S	0======		
3		DESCRIPTION Prefiled testimony of Hal P. Demuth	OFFERED 7	ADMITTED 8	
4 5	44	Appendix D of the Environmental Assessment	81	84	
6	45	Extract of Report 291 Chapter 4	89	89	
7 8		STANTS'	000000	A DALTERED	
9		DESCRIPTION Prefiled testimony of Robert S. Kier	OFFERED 45	ADMITTED 48	
10	7	Prefiled testimony of Michelle A. McFaddin	45	47	
12	TCEQ	Michelle A. Mcraddin			
13	NO. 20	DESCRIPTION	OFFERED 61	ADMITTED 62	
14 15	21		61	62	
16	22		61	62	
17	23		61	62	
18	2425		61 61	62 62	
19	26		61	62	
20	27		61	62	
21	28		61	62	
23	29		61	62	
24	30		61	62	
25	31		61	62	

				Page 5
1	TCEQ			
	NO.	DESCRIPTION	OFFERED	ADMITTED
2	32		61	62
3	33		61	62
4	34		61	62
5	35		61	62
6	36	Prefiled testimony of	62	62
		John J. Santos, P.G.		
7				
	37	Notice of receipt for	62	
8		application for PAA UR02827		
		No. 3		
9				
	38	Revised copy of PAA3	63	64
10				
	39	Revised permit for the	65	65
11		waste disposal wells		
12	40	Revised permit for the	65	65
		waste disposal wells		
13		-		
	41	Letter to Dawn Burton from	66	66
14		Carola Serrato		
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

- 1 THE COURT: Today is August the 4th.
- 2 The time is approximately 10:20 a.m. We're about to
- 3 resume our proceedings. Mr. Demuth is present.
- 4 (The witness was sworn)
- 5 THE COURT: You may begin.
- 6 HAL P. DEMUTH,
- 7 having been first duly sworn, testified as follows:
- 8 DIRECT EXAMINATION
- 9 BY MR. HILL:
- 10 Q. Mr. Demuth, will you state your name for the
- 11 record, please.
- 12 A. Yes. My name is Hal P. Demuth.
- 13 Q. Mr. Demuth, I show you a document
- 14 identified -- of many pages identified as Exhibit URI
- 15 43. Would you look at that document and tell me if
- 16 you can identify whether it is what it purports to be,
- 17 your prefiled testimony.
- 18 A. Yes, I will. Yes, this is my prefiled
- 19 testimony.
- 20 O. Does it contain as well or include as well
- 21 the attachment which includes your credentials or
- 22 qualifications?
- 23 A. The copy I have in front of me has a cover
- 24 page, which is the -- the cover for my statement of
- 25 qualifications. The copy which I have does not have

- 1 my resume attached.
- 2 Q. I hand you now two pages and ask you to
- 3 examine them to determine whether they should be
- 4 included as your qualifications.
- 5 A. Yes. They should be included as my
- 6 qualifications.
- 7 Q. Is that the same -- is that statement of
- 8 qualifications -- is that the same statement of
- 9 qualifications which you submitted with your prefiled
- 10 testimony as Attachment A?
- 11 A. Yes, this is.
- 12 Q. All right. Are there any changes that you
- 13 wanted to make in that or felt necessary to make in
- 14 that testimony such that -- so as to allow you to
- 15 adopt it?
- 16 A. No, there are not.
- 17 Q. Do you wish to adopt the testimony set out in
- 18 Exhibit 43, which exhibit includes the Attachment A as
- 19 a portion of your testimony in this proceeding?
- 20 A. Yes, I do.
- MR. HILL: At this time, your Honor. We
- 22 will offer the Exhibit 43 and tender the witness for
- 23 cross-examination.
- THE COURT: Thank you. Are there any
- 25 objections to 43?

Page 8

- 1 MS. OBERLIN: No objections, your Honor.
- 2 MR. REDMOND: No objections.
- 3 MS. MANN: No objection.
- 4 THE COURT: Exhibit 43 is admitted. And
- 5 cross-examination may commence with Ms. Oberlin.
- 6 CROSS-EXAMINATION
- 7 BY MS. OBERLIN:
- 8 Q. Okay. Good morning, Mr. Demuth. According
- 9 to your prefiled direct testimony, you were engaged in
- 10 February 2005 to review the applications for renewal
- 11 of WDW-248 and 247?
- 12 A. That is correct.
- 13 Q. Okay. And did your review consist of
- 14 primarily reviewing documents about WDW-248 and 247
- 15 that were supplied to you by URI?
- 16 A. I think that was clearly stated in my
- 17 prefiled testimony in terms of what was involved in
- 18 that review. A list of documents is included in my
- 19 prefiled testimony that we reviewed.
- Q. And were those documents supplied to you by
- 21 URI?
- 22 A. Yes, those were supplied by URI.
- Q. Okay. Did you accept the information that
- 24 was supplied to you as true?
- 25 A. Again, that -- if you'd refer to my prefiled

- 1 testimony, we -- we specifically addressed that
- 2 issue. And there's an example in the prefiled where
- 3 we have accepted values from URI. An example is, you
- 4 know, injection, flow rate, or total flow.
- 5 Q. Okay. So, for example, on page 6 you make
- 6 that statement: We accepted URI's statement of
- 7 injection volumes as accurate and factual.
- 8 A. Correct.
- 9 Q. Okay. So your firm did not do an independent
- 10 verification of that particular information?
- 11 A. Correct. We do not sit down at URI's
- 12 operation, and we do not collect the data.
- 13 Q. Okay. Would you consider it an accurate
- 14 characterization of your review to call it a desk
- 15 audit?
- 16 A. Could you explain what you mean by a desk
- 17 audit? I'm not familiar with -- with what you mean
- 18 or --
- 19 Q. Sure. You're called in as an independent
- 20 analyst. You review what's been provided to you. You
- 21 render an opinion, correct?
- 22 A. Correct.
- 23 Q. And you do most of that work at your own
- 24 desk, not on-site at URI's operation?
- 25 A. That is correct.

- 1 Q. Okay. Thank you. And is it also true that
- 2 you testified in your prefiled direct testimony that
- 3 in many instances the site personnel at URI have the
- 4 hands-on and day-to-day experience of what happens at
- 5 URI?
- A. I think it goes without saying, on-site
- 7 personnel are more familiar with the day-to-day
- 8 operations.
- 9 Q. Okay. And I note that you had a visit to
- 10 Kingsville in 2002 to the URI facility?
- 11 A. That is correct.
- 12 Q. Okay. And at that time was your firm called
- on to do any work for URI?
- 14 A. We were engaged, I believe, later in that
- 15 year.
- 16 Q. And were you engaged to do the annual reports
- 17 for WDW-248?
- 18 A. Yes. We did the annual reports for 248 in
- 19 2002 and 2003.
- Q. And did you do those annual reports while
- 21 Mr. Ron Grant was out of the country and not at URI?
- 22 A. I don't recall the details of Mr. Grant's
- 23 location at that time, but I can speak to the fact
- 24 that we did those reports.
- 25 Q. Do you know if Mr. Grant did the reports

- 1 prior to your doing those reports at URI?
- 2 A. We did not have a professional relationship
- 3 with URI prior to that time, so I'm not privy to the
- 4 details of who did what or who was where.
- 5 Q. Did you review the annual reports for WDW-248
- 6 in preparing to prefile your testimony?
- 7 A. Yes.
- 8 Q. And do you recall who did the WDW annual
- 9 reports prior to your firm doing those reports?
- 10 A. I don't recall. I know Mr. Grant was
- 11 previously employed at URI, so he was involved.
- 12 Q. Okay. And do you know who at URI has done
- the 2004 WDW annual report?
- 14 A. I don't recall that is information that was
- 15 submitted as part of the prefiled. I don't recall
- 16 whose signature is on that report.
- 17 Q. Okay. On page 3 of your prefiled direct
- 18 testimony, you note a few discrepancies regarding the
- 19 geology surrounding WDW-248. Is all of that
- 20 information still true and accurate?
- 21 A. Could you clarify the question? In terms of
- 22 when you refer to information, are you referring to my
- 23 statement there in terms of the typographical errors?
- Q. Yes. Is it -- are the statements you make on
- 25 page 3 still true and accurate today?

- 1 A. To the best of my knowledge, they are.
- Q. Okay. So it's true that the actual confining
- 3 layer below the receiving layer of WDW-248 is 1200
- 4 feet thick rather than the 3,000 to 4,000 feet thick
- 5 that's noted in some places in the materials you
- 6 reviewed from URI?
- 7 A. The statement that is in the prefiled is --
- 8 we remain that we stand behind that statement.
- 9 Q. Okay.
- 10 A. We could look at some of the cross sections
- 11 and discuss that.
- 12 Q. Okay. So you still stand by your statement
- 13 that the thickness of the Goliad sand is 700 and not
- 14 500 as reported in Table V, slash, A in Section B-2?
- 15 I'm not trying to be confusing. I'm sort of just
- 16 making a record here of -- on the transcript. So if
- 17 the answer is simply yes, that's no problem.
- THE COURT: Mr. Demuth, before you
- 19 respond, let's go off the record for just a second.
- 20 (Discussion off the record)
- THE COURT: I'm sorry. Please continue.
- Q. (By Ms. Oberlin) Okay. Mr. Demuth, I'm
- 23 asking you some questions to have you state out loud
- 24 some of the opinions that you put in your prefiled
- 25 testimony. That serves several purposes.

- 1 It helps us complete the transcript, and
- 2 it helps some folks who are here today who have not
- 3 been able to read your prefiled direct testimony to
- 4 hear the answers to my questions. Your counsel will
- 5 have an opportunity to redirect and ask you questions
- 6 also. And some of that may have been covered in your
- 7 prefiled, but there's no prohibition on anyone asking
- 8 you those questions again.
- 9 So I'm not asking you these questions to
- 10 confuse you or trick you. I simply would like those
- 11 here who have not read the prefiled direct testimony
- 12 to hear it and also for you to state that it's still
- 13 true and that there is no mistake you're aware of. So
- 14 those are the nature of my questions, and I'm sorry if
- 15 that hasn't been made clear to you before.
- So going back to page 3 of your prefiled
- 17 direct testimony, I asked you if it's true that your
- 18 statement that the Goliad formation averages
- 19 approximately 700 feet thick within the permit area,
- 20 not 500 feet as was stated in the materials you
- 21 received from URI in Table V, slash A, in Section B-2.
- 22 A. I do not have any new information to change
- 23 the opinion there.
- Q. Okay. And so if I proceeded through this
- 25 page, that would be your answer to every question I

- 1 asked you, that you do not have new information?
- 2 A. That would be correct.
- 3 Q. Okay. Well, then, I'm going to move on from
- 4 that. On page 8 you testified that you were reviewing
- 5 not -- in the materials you were reviewing from URI,
- 6 you were reviewing data that was prepared by third
- 7 parties, such as Reed & Associates, Wesley W. Smith,
- 8 and Core Laboratories. Is that true?
- 9 A. That is correct.
- 10 Q. Okay. On page 10 of your prefiled direct
- 11 testimony, you're -- you talk about a corrosion
- 12 monitoring program in the last full paragraph of that
- 13 page. And you make the statement that this -- that
- 14 site personnel have a specific hands-on understanding
- 15 that is difficult to convey in written documents. Can
- 16 you describe for me some of the information that would
- 17 be difficult to put in writing?
- 18 A. Yes. Some of that information is related to
- 19 day-to-day operations. If there's an injection line
- 20 that the site personnel replace, then they have an
- 21 opportunity to visually inspect that line, and they
- 22 have an understanding of -- of do they have a
- 23 corrosion issue or do -- do they not.
- Q. Okay. And as far as having a general opinion
- 25 about corrosion issues, that's something that you

- 1 could or could not gather from the documents you were
- 2 reviewing?
- 3 A. I believe in my prefile we -- we address
- 4 that. Certainly, there is a long operational history
- 5 which clearly demonstrates compatibility between the
- 6 materials of construction and the injected fluid.
- 7 Q. Okay. On page 13 of your prefiled direct
- 8 testimony, you note that the operating procedure --
- 9 you note that a long list of things are virtually
- identical between WDW-247 and WDW-248. Can you recall
- 11 now any of the things that are not identical?
- 12 A. Could you tell which -- give me some
- 13 clarification --
- 14 O. Oh, sure.
- 15 A. -- on which number you're referring to,
- 16 please?
- 17 Q. Sure. I apologize. I'm looking down -- in
- 18 the middle of the page, there's a paragraph numbered
- 19 39. And then if you go below that, there's a
- 20 paragraph numbered 2, and that paragraph describes a
- 21 long list of things. And you make the statement that
- long list of things are virtually identical between
- 23 WDW-247 and WDW-248. When you say virtually
- 24 identical, do you mean identical or nearly identical?
- 25 A. I would classify that as nearly identical.

- 1 They are different wells. All the formations are not
- 2 going to come in at the identical depth. Field
- 3 procedures might be a little different. So very
- 4 similar, yes. No two wells are going to be identical.
- 5 Q. Okay. And do you remember with particularity
- 6 any of the differences between WDW-247 and 248 at this
- 7 time?
- 8 A. I do not recall.
- 9 Q. Okay. Because no two wells are identical,
- 10 would you agree that it's not possible to conclusively
- 11 rely on the past performance of one well to describe
- 12 the future performance of another well?
- 13 A. No. I would not agree with that statement.
- 14 Q. Okay. Why wouldn't you agree with that
- 15 statement?
- 16 A. Differences between wells do not necessarily
- 17 change the applicability of the technology and the
- 18 design for the intent of use. If I might give an
- 19 example.
- 20 O. Please.
- 21 A. I can have a red car and you can have a green
- 22 car. Otherwise, they can be virtually identical.
- 23 They're both suitable for either one of us to drive.
- Q. But in your example, you couldn't look at a
- 25 log of where the red car had driven throughout its

- 1 life and make an assumption that the green car would
- 2 drive in similar locations, could you?
- 3 A. I don't see any reason why not. From a
- 4 technical, regulatory, and scientific basis, there are
- 5 enough similarities that one can make a judgment from
- 6 a -- from a technical standpoint that that same
- 7 technology and approach can be applied again.
- 8 Q. Okay. Would you expect possibly to see some
- 9 small differences in performance of a second well
- 10 that --
- 11 A. Certainly.
- 12 Q. Okay.
- 13 A. I would not expect to see any differences in
- 14 terms of protection of the underground sources of
- drinking water, which are the primary focus of Class I
- 16 UIC program. The well might take a different rate of
- 17 fluid. It might have a different permeability by a
- 18 minor degree. Those are differences but do not affect
- 19 the protection of USDW and the intended use.
- 20 Q. So by modeling or projection, you would
- 21 expect to see the same performance of a second well
- 22 designed to be similar to the first?
- 23 A. I would expect it to be similar. I would not
- 24 expect it to be the same.
- Q. Okay. On page 15 of your direct testimony,

- 1 you'll see a paragraph numbered 43 near the top of the
- 2 page and below that a paragraph No. 1. And in
- 3 paragraph No. 1, you mention some operating
- 4 characteristics and limitations indicated by Chapter
- 5 6-A and Chapter 6-B. Do you recall what limitations
- 6 are mentioned in those chapters?
- 7 A. I don't recall specifically, but typically
- 8 those are operating parameters in terms of maximum
- 9 operating pressure, those kind of issues.
- 10 Q. Okay. On page 16 in the first complete
- 11 paragraph at the top of the page, you note that TCEQ
- 12 regulations require the applicant to inventory all
- 13 artificial penetrations whose surface location falls
- 14 within either 2.5 airline miles of the site or WDW-248
- or within the same radius of proposed WDW-247. And I
- 16 wonder if you can just quickly tell me -- all
- 17 artificial penetrations, that means any well in the
- 18 area?
- 19 A. That means any well. Obviously, the wells of
- 20 concern are those that penetrate at a depth to the
- 21 proposed injection zone.
- Q. Okay. So when you're talking about
- 23 artificial penetrations in that sentence, what types
- of wells are you typically talking about?
- 25 A. Well, the area review analysis does -- does

- 1 include a presentation on water wells --
- 2 Q. Okay.
- 3 A. -- in terms of shallow wells. From a
- 4 technical standpoint, the issues of concern when
- 5 you're looking at reservoir mechanics and AOR are the
- 6 wells that penetrate to the disposal zone that could
- 7 potentially be a pathway for flow from the disposal
- 8 zone to USDW.
- 9 Q. So in the application materials, the
- 10 artificial penetrations that were inventoried include
- 11 private drinking water wells, any oil and gas wells
- 12 that might be in the area, and any other well, whether
- 13 private or owned by UR- -- privately owned by someone
- 14 other than URI and URI's own wells?
- 15 A. I would want to flip back through the
- 16 application and make sure that we're talking about all
- 17 of those.
- 18 Q. Are those types of wells typically considered
- 19 artificial penetrations?
- 20 A. Could you clarify again when you say types of
- 21 wells? Can you -- you tie that down for me?
- 22 Q. Sure. Are drinking water wells artificial
- 23 penetrations?
- 24 A. Certainly, they are artificial penetrations.
- 25 When you look at the cone of influence calculation,

- 1 though, that is applied to wells that penetrate the
- 2 receiving formation for -- for the Class I disposal
- 3 well.
- 4 Q. Okay. So can you give me a brief description
- 5 of the cone of influence, which you also mentioned in
- 6 that same paragraph?
- 7 A. Certainly.
- 8 Q. Thank you.
- 9 A. Cone of influence is the aerial distance over
- 10 which an artificial penetration could potentially --
- 11 excuse me -- allow flow from the disposal zone to an
- 12 underground source of drinking water. In a nutshell,
- 13 it's -- it's the area over which a pressure rise due
- 14 to injection in the Class I disposal well could
- 15 transmit fluid from point A in a disposal zone to
- 16 point B being a shallow USDW.
- 17 Q. So the cone of influence is always -- is
- 18 always dealing with a relationship between the
- 19 receiving aquifer for the disposal well and U.S.
- 20 drinking water aguifers?
- 21 A. Could you restate that, please?
- Q. Well, you're suggesting that the cone of
- 23 influence, if I understood you correct, is the
- 24 relationship between the receiving aquifer for the
- 25 injection at WDW-248 or -- at an injection well and

- 1 U.S. drinking water aguifers.
- 2 Is that the only relationship the cone
- 3 of influence describes? For example, did the cone
- 4 of -- does a cone of influence also describe effects
- 5 on any aquifer, whether they be U.S. drinking water
- 6 aquifers or not, or are they always describing the
- 7 effect on U.S. drinking water aquifers?
- 8 A. I don't have the -- the federal regs in front
- 9 of me. But as I recall off the top of my head, the
- 10 regulatory definition in the federal regs refers to
- 11 USDW. And that was one of the primary focuses of the
- 12 Safe Drinking Water Act and some of the genesis of the
- 13 UIC program.
- 14 Q. So a cone of influence isn't a general
- 15 scientific description of the effect of the receiving
- 16 containing aquifer on surrounding geologic strata?
- 17 A. The -- the premise behind cone of influence
- 18 is that you have a -- a possible pathway from the
- 19 disposal zone to an underground source of drinking
- 20 water. So in that sense, the cone of influence
- 21 calculation does not relate to the impact on overlying
- 22 or underlying strata, per say.
- 23 Q. So if you had an injection well,
- 24 hypothetically speaking, and there were no U.S.
- 25 drinking water aguifers in the surrounding area, there

- 1 would be no cone of influence associated with the deep
- 2 injection well?
- 3 A. There certainly are situations where the
- 4 calculated cone of influence is zero.
- 5 Q. Okay. And that is because there is no U.S.
- 6 drinking water in -- in proximity to the deep
- 7 injection well?
- 8 A. That can be the case. It can also be the
- 9 case where you never have a pressure rise in a
- 10 disposal zone sufficient to transmit fluids to the
- 11 USDA.
- 12 Q. Okay.
- 13 A. And we have numerous projects where we
- 14 have -- in other states where we have exactly that
- 15 situation.
- 16 Q. Okay.
- 17 A. We still have an area of review per statute,
- 18 but the -- the calculated cone of influence may be
- 19 zero.
- Q. But at the WDW-248, there is a cone of
- 21 influence?
- 22 A. There is a calculated cone of influence which
- is presented in the permit application.
- O. Okay. And that cone of influence calculation
- is not zero for WDW-248?

- 1 A. That is correct.
- Q. Okay. Also -- excuse me. I'm a layperson.
- 3 I'm asking for some clarification here. In that
- 4 sentence you talk about 2.5 airline miles. And can
- 5 you just tell me what you-all mean in the industry
- 6 when you use the term airline miles?
- 7 A. That would just be air miles direct from
- 8 point A to point B.
- 9 Q. So you could measure that on a map, for
- 10 example, by laying a ruler flat on the map?
- 11 A. That would be correct.
- 12 Q. Okay. Thank you. Do you know -- well, are
- 13 you an engineer, Mr. Demuth?
- 14 A. I have an engineering degree, yes, ma'am.
- 15 Q. Where is your degree from?
- 16 A. University of Tulsa.
- 17 Q. And what year did you graduate?
- 18 A. 1983.
- 19 Q. And you also have a master's degree?
- 20 A. That is correct.
- 21 Q. And from where is your master's degree?
- 22 A. University of Idaho.
- Q. Okay. And what's the subject of your
- 24 master's degree?
- 25 A. Hydrogeology.

- 1 Q. Are you an engineer registered in the state
- 2 of Texas?
- 3 A. I am not.
- 4 Q. Did you seal any of the documents included in
- 5 the applications for renewal of WDW-248 or 247?
- 6 A. No, I did not.
- 7 Q. Do you know the engineer who did?
- 8 A. No.
- 9 Q. Okay. So you've never spoken to that
- 10 engineer?
- 11 A. No. There are some people in our office that
- 12 I think know of him, but I have never talked to
- 13 Mr. Smith.
- 14 Q. Okay. And just to be clear for the record,
- 15 your office did not prepare the applications for
- 16 renewal of WDW-248 or 247?
- 17 A. That is correct.
- 18 Q. Okay. Nor did your office prepare the
- original permit applications for WDW-248 or 247?
- 20 A. That is correct.
- 21 Q. Okay. Do you know whether the information in
- 22 the renewal applications is the same material in some
- 23 part as that which was submitted with the original
- 24 permit application, or was all the information newly
- 25 created at the time of the renewal applications?

- 1 A. I believe there is both old information and
- 2 updated information.
- MS. OBERLIN: Okay. Thank you. Pass
- 4 the witness.
- 5 CROSS-EXAMINATION
- 6 BY MR. REDMOND:
- 7 Q. Mr. Demuth, are waste disposal wells WDW-247
- 8 and WDW-248 permitted to operate simultaneously at
- 9 their maximum injection rates?
- MR. HILL: Excuse me. Can we go off the
- 11 record just a second?
- MR. REDMOND: Yes.
- 13 (Off the record)
- 14 A. I don't recall whether that is the case. I
- don't recall verbiage in the permit for 247 or 248. I
- don't recall that there is language that discusses the
- 17 simultaneous operation. There may be some in -- in
- 18 the documentation between URI and TCEQ, but I cannot
- 19 speak definitively to that issue.
- 20 Q. If you reviewed the current permits for those
- 21 injection wells, could you be able to make that
- 22 determination?
- 23 A. Yes.
- MR. REDMOND: Can we go off the record
- 25 to find those permits, your Honor?

- 1 THE COURT: Certainly. Let's go off the
- 2 record.
- 3 (Off the record)
- 4 Q. (By Mr. Redmond) Mr. Demuth, after reviewing
- 5 the draft permits for WDW-247 and 248, did you find
- 6 any provisions relating to the maximum injection rate
- 7 for those injection wells?
- 8 A. Let me clarify what -- what I have reviewed.
- 9 I've reviewed TCEQ Exhibits 39 and 40, which are
- 10 presented to me here. There is -- I believe your
- 11 question previously was did it allow for simultaneous
- 12 operation. Based on -- on re-reviewing those
- documents, there is not specific verbiage that I'm
- 14 aware of that talks about simultaneous or
- 15 nonsimultaneous operation. There is a limit on the
- 16 total volume that can be injected by the two wells on
- 17 an annual basis.
- 18 O. And what is that limit?
- 19 A. In Exhibit 40 the permit for 248 under
- 20 Section 7-E, it says accumulated volume of wastewater
- 21 injected into WDW-247 and 248 shall not exceed
- 22 13,392,000 gallons per month or 100,120,000 gallons
- 23 per year.
- 24 O. And is that the same for both of the draft
- 25 permits?

- 1 A. I believe it is. Let me check that quickly.
- 2 That same value is included in both of the exhibits
- 3 I'm looking at now.
- 4 MR. REDMOND: Okay. Thank you very
- 5 much. I have no further questions, and I pass the
- 6 witness.
- 7 THE COURT: OPIC.
- 8 CROSS-EXAMINATION
- 9 BY MS. MANN:
- 10 Q. I have a couple -- I have a couple of
- 11 questions about your statements that -- there are
- 12 several similar statements. I think they begin on
- page 15 of 22, and they are in relation to different
- 14 portions of the renewal permit, I -- I believe.
- 15 And I'm referring to the statements
- 16 whether or not there are -- and this particular one is
- in 43, paragraph 43, subparagraph 4, if there are
- 18 technical regulatory bases for materially changing
- 19 either permit.
- 20 And that particular statement is
- 21 repeated again on page 18 of 22 and paragraph 51,
- 22 subparagraph 3; page 20 of 22, subparagraph 4, the top
- of the page; page 21 of 22, subparagraph 3 of
- 24 paragraph 59.
- I believe that's all that I've

- 1 highlighted. When you make the statement there's no
- 2 regulatory basis for -- and then fill in the blank,
- 3 what -- by -- what do you mean by regulatory basis?
- 4 A. What we mean there is that based on what's
- 5 presented in the application and our review of -- of
- 6 that document and a review of the other documents
- 7 which are specifically listed in the prefile and the
- 8 work that we have -- have done directly over the years
- 9 for URI and our knowledge of their wells that we do
- 10 not see a regulatory basis for denying the permit.
- 11 Q. Do you -- did you specifically review any
- 12 regulations outside what was presented in the
- 13 application?
- 14 A. Well, the TCEQ Chapter 331 regulations for
- 15 UIC wells, as well as the 305 regulations, for general
- 16 permitting issues.
- 17 Q. Did you review, for example, the compliance
- 18 history regulations required to be considered when
- 19 reviewing -- or when TCEQ reviews a permit amendment?
- 20 A. Can you refer specifically to the regulation
- 21 in that matter?
- Q. Do you -- I'll rephrase. Do you have any
- 23 knowledge of their compliance history with regards to
- 24 this application?
- 25 A. I do have some knowledge of their compliance

- 1 history, yes.
- 2 Q. But you don't -- you can't specifically
- 3 tell -- but can you specifically tell me whether or
- 4 not your review of the regulations -- I'm not -- I'm
- 5 looking for the exact reg number on that. But are you
- 6 able to specifically tell me a regulation that you
- 7 reviewed in conjunction with the compliance history
- 8 background?
- 9 A. Most of the compliance issues are laid out
- 10 pretty clearly in 331.
- 11 Q. Okay.
- 12 A. There are -- as many of the Texas regulations
- 13 are written, there are some tendrils that tie into
- 14 other regulations. But our primary focus is looking
- 15 at -- at the 331 regulations --
- 16 Q. Okay.
- 17 A. -- and the compliance history and also what
- is included in the application, the annual reports,
- 19 the MIT reports.
- 20 Q. Okay. Are you familiar with the way the
- 21 commission -- are you familiar with the way the
- 22 commission considers compliance history with regards
- 23 to applications?
- 24 A. Could you enlighten me in terms of what your
- 25 understanding is?

- 1 Q. No. I -- I mean -- I'll rephrase. Do you
- 2 have any familiarity with the commission's
- 3 consideration of compliance history with regards to
- 4 permit applications?
- 5 A. Yes, I do. And that is laid out in a
- 6 regulatory program as well as the guidance. And if my
- 7 memory serves me correctly, that issue is included in
- 8 the prefiled testimony for John Santos.
- 9 MS. MANN: No further questions. I pass
- 10 the witness.
- 11 EXAMINATION
- 12 BY THE COURT:
- 13 Q. I have a question or two for you. Your
- 14 background is in geology and hydrology?
- 15 A. My bachelor's degree is petroleum
- 16 engineering. My master's degree is in hydrogeology.
- 17 Q. How is it that uranium is found in the
- 18 substrata of South Texas? I'm -- I typically
- 19 associate that and obviously -- but I typically
- 20 associate that with hard rock geology as opposed to
- 21 soft rock geology.
- 22 A. Your Honor, I'm not a uranium geologist nor
- 23 will I -- I try to sell myself as one. I do a lot of
- 24 work on the deposits in Nebraska, the Powder River
- 25 Basin. And your premise there in terms of tying it to

- 1 hard rock geology is entirely correct. The genesis
- 2 and development of the uranium deposits in this area,
- 3 I think, is much better discussed by Mark Pelizza than
- 4 by me.
- 5 Q. Okay. Is it fair to say that -- that the
- 6 type of expertise that you bring to this process is in
- 7 the intersection between your knowledge of hydrology
- 8 and your knowledge of regulatory affairs affecting
- 9 hydrology?
- 10 A. That is correct.
- 11 Q. Okay. One of the issues that has come up
- 12 in -- in this proceeding is compliance history, a
- 13 matter that was brought up by counsel for OPIC. And
- 14 do I understand your testimony correctly that -- that
- 15 you have reviewed the compliance history of URI, and
- 16 it does not pose a regulatory concern for you?
- 17 A. I have reviewed issues specifically related
- 18 to Class I operations, which is the disposal well. We
- 19 have not been requested nor have we performed a review
- 20 of compliance issues relating to Class III operations.
- 21 Q. Okay.
- 22 A. Based on what we have seen in terms of the
- 23 compliance history related to Class I operations, it
- 24 demonstrates to me that URI has -- and has the ability
- 25 to continue to operate WDW-248 in a manner that is

- 1 consistent with their existing permit and is
- 2 protective of underground sources of drinking water.
- 3 Q. Have you examined those instances in which
- 4 URI has been found by the state regulatory authorities
- 5 not to be in compliance with regulations?
- 6 A. What -- yes. One example I can -- can
- 7 present was the exceedance of maximum injection
- 8 pressure by 2 psi. That is an issue which URI
- 9 reported to the state as was appropriate. There's
- 10 been correspondence from TCEQ back regarding that
- 11 issue.
- 12 And I have talked to their operational
- 13 personnel as well in terms of how are they going to --
- 14 what procedures are in place to avoid such an event
- 15 reoccurring. Quite frankly, your Honor, in close to
- 16 15, 16 years of operation, the -- the trail of
- 17 compliance problems, if you will, is very short.
- So there are some places where mainly
- 19 operational or administrative issues, you can say we
- 20 need to dot another I and cross another T. But in my
- 21 professional opinion, their history of compliance
- related to WDW-248 supports their continued operation
- 23 of that well and the operation in the future of
- 24 WDW 247.
- 25 Q. I -- I note in -- in having reviewed some of

- 1 the prefiled testimony that the TCEQ -- the Texas
- 2 Commission on Environmental Quality's registration
- 3 review and reporting division gave URI a score on its
- 4 compliance behavior.
- 5 A. Uh-huh.
- 6 Q. And -- and it's my understanding that score
- 7 is a 1.8. Can you provide me some understanding of
- 8 how a 1.8 fits into the greater regulatory scoring
- 9 scheme? Is this an A or a B? Are we -- are we
- 10 dealing with something that is drastically in need of
- 11 repair or -- help me out here.
- 12 A. Your Honor, I really can't help you out on
- 13 that issue. I would defer that to the TCEQ staff. We
- 14 work in -- in probably 16 different states.
- 15 Q. Okay.
- 16 A. So there are -- are different scoring and
- 17 different criteria for different states in different
- 18 EPA regions.
- 19 Q. So would it be fair to say, then, that your
- 20 conclusion about URI's compliance history is based on
- 21 your examination of the reports regarding their
- 22 individual compliance incidence rather than the
- 23 scoring mechanism that has been used?
- 24 A. That is correct.
- THE COURT: Okay. Those are all my

- 1 questions. Mr. Hill may have a few more.
- 2 REDIRECT EXAMINATION
- 3 BY MR. HILL:
- Q. Mr. Demuth, earlier you used, I believe, the
- 5 acronym AOR. Would you speak to the record what that
- 6 referred to?
- 7 A. Yes, I will. AOR has a -- a regulatory
- 8 definition as the area of review -- of review. And
- 9 that is an area over which an inventory of -- of data
- 10 needs to be compiled and submitted as part of the
- 11 permit application.
- 12 Q. Earlier you spoke of a cone of influence.
- 13 Generically what is the cone of influence of a well?
- 14 A. The cone of influence as designated under the
- 15 UIC program, both on a federal level and on a state
- 16 level, is that area or radius from a -- an injection
- 17 well where the pressure rise due to injection is
- 18 sufficient to cause flow from the disposal zone to a
- 19 USDW if there were a hypothetical pathway between the
- 20 two points.
- 21 Q. Okay. I -- I'm looking really for the notion
- 22 of what is a cone of influence, not how is it used
- 23 regulatory. If you envision the operation of a well,
- 24 why do we speak of a cone? What -- can you just give
- 25 me a simple --

- 1 A. Okay.
- 2 Q. -- hydrologist characterization of what is
- 3 meant by that term for those of us here? We're laymen
- 4 in this.
- 5 A. Okay. I might take the inverse and -- and
- 6 let's conceptualize a whirlpool. Okay. If we look at
- 7 a whirlpool, there's a radial distance from the center
- 8 of that whirlpool where the level of the water is
- 9 lower. Okay? Let's take that and turn it around, and
- 10 we got a pressure rise due to injection.
- 11 Q. Would it be fair to say, then, the
- 12 pressure -- the pressure increased -- or pardon me.
- 13 In the event of -- in the event of withdrawal of the
- 14 fluids, the pressure decreased produces a cone?
- 15 A. Correct.
- 16 Q. Whereas in the case of injection, the cone
- of -- the cone of influence may, in fact, be a cone
- 18 standing the other way around with the -- with the
- 19 funnel at the top, and the sides would represent that
- 20 area of gradually increasing pressure -- increasing
- 21 pressure to the base of the cone?
- 22 A. Well, gradually decreasing pressure.
- 23 Q. Decreasing pressure to the base --
- A. Correct.
- 25 Q. -- of the cone? All right.

- 1 A. Yes.
- 2 Q. And did you draw any conclusion in performing
- 3 the calculations which you performed for this work or
- 4 for the work that you did in preparing the 2002, 2003,
- 5 2004 annual reports for WDW-248 as to whether the
- 6 increases in pressure associated with the injection
- 7 which would occur in the case of the application here
- 8 or did occur in the case of the annual reports
- 9 threatened to be sufficient to drive fluids in the
- 10 zone of injection up out of that zone of injection
- 11 through some other escape avenue, such as some other
- 12 hole drilled into or near the formation or some known
- 13 geologic feature or discontinuity?
- 14 A. Yes. We did come to some conclusions.
- 15 Q. And what was your conclusion in that
- 16 connection?
- 17 A. Our conclusions were that there is no cone of
- influence which reaches out radially from the well to
- 19 a distance sufficient where it meet -- meets an
- 20 artificial penetration and could cause flow from the
- 21 injection zone to USDW.
- So in layman's term that based on the
- 23 permit conditions in the historical operation of a
- 24 well, it was being operated in a way such that the
- 25 underground sources of drinking water were being

- 1 protected.
- Q. When you look at the cone or hypothetical
- 3 cone of influence associated with 248 or a
- 4 hypothetical cone of influence which would be
- 5 associated with 247, are you speaking of a cone which
- 6 rises out of or is expressed out of or above the Frio
- 7 formation, or is this a cone of influence found in the
- 8 injection formation only?
- 9 A. It is a pressure rise within the injection
- 10 zone, and you have confining zones above and below.
- 11 So that is an increase in pressure which is confined
- 12 to that unique geologic unit.
- 13 Q. Then, would -- would we look for any pressure
- 14 effect from the operation of WDW-248 or 247 in any
- 15 zone above the Frio formation at -- at the zone of
- 16 injection?
- 17 A. No, you would not anticipate that. You --
- 18 the -- the application has demonstrated confinement.
- 19 Q. All right.
- 20 A. And the -- the AOR review in the application
- 21 which is subsequently updated to each year in the
- 22 annual reports addresses the issue of artificial
- 23 penetrations. So we would not expect any impact to be
- 24 at water quality or pressure rise on shallow results.
- Q. Are you aware that this well is associated

- 1 with a facility that is conducting mining operations
- 2 through Class III wells in the Goliad formation? Is
- 3 that correct?
- A. I'm aware of that.
- 5 Q. Okay. Is it, then, your testimony that one
- 6 does -- there is no effect of -- pressure effect from
- 7 this well that is completed into the Frio upon the
- 8 Goliad?
- 9 A. I'm not aware of any response or pressure
- 10 impact from the operation of the Class I well on the
- 11 Goliad.
- 12 Q. Given the geology and what you know of the
- 13 construction, would you expect there could be any?
- 14 A. I certainly would not expect it.
- MR. HILL: Thank you. Pass the witness.
- 16 RECROSS-EXAMINATION
- 17 BY MS. OBERLIN:
- 18 Q. In answering the questions about the
- 19 regulations that you reviewed in preparation for your
- 20 testimony, you testified that you also reviewed TCEQ
- 21 quidance documents?
- 22 A. That is correct.
- 23 Q. And with regard to the statements that
- 24 Ms. Mann pointed out to you regarding regulatory basis
- 25 for materially changing either permit, in your review

- 1 and in your opinion, do you have any suggestions for
- 2 something less than materially changing the draft
- 3 permits?
- 4 A. Well, I -- I remind you that I'm here on a
- 5 technical basis, not as a representative of TCEQ. I do
- 6 not have any technical basis or problems with what is
- 7 in the application from a technical standpoint nor do
- 8 I see that there's a hole somewhere that, you know, it
- 9 is inconsistent with the state regulations. But I am
- 10 not an employee of TCEQ.
- 11 Q. Okay. When you considered the compliance
- 12 history of URI, were you considering compliance
- related only to WDW-248?
- 14 A. Yes. As I just shared with the judge, my
- 15 involvement here is -- is focused solely on Class I
- 16 issues.
- 17 Q. Okay. And would you consider it a regulatory
- 18 compliance violation if URI chose not to run WDW-248
- 19 at any particular time?
- 20 A. I'm not aware that there is anything in their
- 21 permit that requires operation of that well.
- 22 Q. Okay.
- 23 A. There is required financial assurance. There
- 24 is required mechanical integrity testing.
- 25 Q. But if URI made a decision to temporarily

- 1 cease injection for any reason, you do not consider
- 2 that a compliance violation?
- 3 A. I do not.
- 4 Q. When you were reviewing compliance, did you
- 5 consider how compliance at WDW-248 -- well, let me
- 6 restate the question. When you were reviewing the
- 7 compliance, did you consider how -- any halt in
- 8 operation of WDW-248 affects the operation of the
- 9 Class III wells that URI operates?
- 10 A. Could you restate that question, please?
- 11 Q. Sure. Okay. You testified that you know
- 12 that URI has Class III injection wells. Do you know
- that those Class III injection wells are in production
- 14 areas where they're mining uranium?
- 15 A. I do.
- 16 Q. Okay. When you were reviewing the compliance
- 17 at WDW-248, did you make any study of what effect the
- operation of WDW-248 has on URI's mining operations in
- 19 production areas that use Class III wells?
- 20 A. That was not part of what we were requested
- 21 to do. Certainly, I'm familiar with that because we
- 22 work other facilities in other parts of the country
- 23 where we have both -- both Class III and Class I
- 24 operations. I don't see how that is a compliance
- 25 issue, quite frankly.

- 1 Q. Okay. How do you test for the cone of
- 2 influence at the deep injection well?
- 3 A. You don't. It's calculated based on
- 4 parameters from actual testing operations. But you do
- 5 not have a well that is located in the same zone
- 6 commonly at a near distance, so that is a calculated
- 7 value.
- MS. OBERLIN: Okay. Pass the witness,
- 9 your Honor.
- MR. REDMOND: I pass the witness.
- 11 RECROSS-EXAMINATION
- 12 BY MS. MANN:
- 13 Q. I have one question. Is it your opinion or
- 14 your understanding that the only compliance history
- 15 that should be considered for renewal of these
- 16 injection well permits is that for the injection wells
- 17 alone? So -- would you like me to rephrase it?
- 18 A. Could you rephrase it, please?
- 19 Q. Sure. Is it your understanding that -- that
- 20 when considering compliance history and determining
- 21 whether or not to renew a permit for 248 and for
- 22 247 -- when we're considering that compliance history,
- 23 that universal compliance history, that the only
- 24 compliance history that should be considered or is
- 25 considered is that for those -- is the history for

- 1 those wells in particular?
- 2 A. Again, I would remind you, I'm an independent
- 3 consultant, not an employee of TCEQ. Our primary
- 4 focus when we review documents, you know, is the
- 5 technical issues.
- 6 Q. Right.
- 7 A. Certainly, we look at the regulatory issues
- 8 as well. But I don't see that the compliance history
- 9 related to Class III operations has any direct bearing
- on the compliance history and renewal of 247 and 248
- 11 permits.
- 12 Q. And do you say that from a technical
- 13 standpoint or a regulatory standpoint or an
- 14 all-inclusive standpoint?
- 15 A. I say that from a technical standpoint.
- 16 Q. Okay. Do you know the regulatory standpoint
- 17 on that point?
- 18 A. I'm not aware that there is a direct link
- 19 between Class III and Class I with regard to approval
- 20 of the 247 and 248 permits.
- 21 O. And I'm --
- 22 A. Certainly, the two are tied together in terms
- of processing water from the Class III operations.
- 24 But commonly there is not a link from Class III that
- 25 takes you automatically to Class I or vice versa.

- 1 Q. I -- I guess I'm speaking -- I'm -- what
- 2 I'm trying to ask you, is I'm speaking directly for
- 3 compliance history and -- or a history of compliance.
- 4 Do you think that the history of compliance for
- 5 Class III wells has any bearing on Class I wells and
- 6 vice versa?
- 7 MR. HILL: Asked and answered.
- 8 THE COURT: Do you understand the
- 9 question?
- 10 A. If you could -- could clarify it. I'm unsure
- 11 whether we're talking about kind of a regulatory issue
- or whether we're talking about kind of a -- how do we
- 13 feel good about --
- Q. (By Ms. Mann) Right.
- 15 A. -- our neighbor issue. So if you could
- 16 clarify that, I would appreciate it.
- 17 Q. Absolutely. I'm speaking from a regulatory
- 18 standpoint because you mentioned several times you
- 19 found no regulatory issues, and I was just -- I was
- 20 trying to make sure I understood that you meant --
- 21 when you meant regulatory issues, you included
- 22 compliance history because that is one of the
- 23 regulatory issues which is considered -- is that true?
- 24 You considered compliance history inasmuch as --
- 25 A. Yes, we do.

- 1 Q. Okay. And next I wanted to make sure that I
- 2 understood you to mean, you -- specifically the
- 3 compliance history for the injection wells which were
- 4 being -- which had renewal applications as opposed to
- 5 all activities conducted by the -- by the applicant;
- 6 in this case, URI.
- 7 A. Okay. Thank you for that clarification.
- 8 Q. Okay.
- 9 A. The -- the reference to those regulatory
- 10 issues and our professional opinion supporting the
- 11 renewal of the 247 and 248 applications is based on
- 12 review of the compliance history for 248.
- 13 Q. That's all I needed.
- MS. MANN: Thank you very much.
- 15 THE WITNESS: Thank you.
- THE COURT: Redirect?
- 17 MR. HILL: No redirect, your Honor.
- 18 THE COURT: I believe that terminates
- 19 the testimony. Mr. Demuth, thank you very much for
- 20 your appearance today. You're excused as a witness,
- 21 but you're welcome to remain in the courtroom and
- 22 observe the proceedings.
- THE WITNESS: Thank you, your Honor.
- 24 THE COURT: Let's take a short break.
- 25 (Recess)

- 1 THE COURT: And, Ms. Oberlin, you have
- 2 something that you would like to present?
- 3 MS. OBERLIN: Yes. Pursuant to
- 4 stipulations of the parties here, we are now offering
- 5 into evidence the prefiled testimony of Robert S. Kier
- 6 filed on behalf of South Texas Opposes Pollution and
- 7 Hermila Garcia. This is Protestants' Exhibit 6.
- 8 We are also entering into evidence the
- 9 prefiled testimony of Michelle A. McFaddin filed on
- 10 behalf of South Texas Opposes Pollution and Hermila
- 11 Garcia. This is Protestants' Exhibit 7.
- 12 THE COURT: And are there any objections
- 13 by -- yeah.
- 14 MR. HILL: According to the stipulation,
- 15 we do not object to the witness not being here in the
- 16 case of Ms. McFaddin, not being here to sponsor the
- 17 exhibit. We are also -- we also do not object to her
- 18 not being here to authenticate it. We also -- that is
- 19 to say, her prefiled.
- We also waive the objection that she was
- 21 not here to stand for cross-examination. However, we
- 22 do believe that the exhibits which she attaches, other
- 23 than her own resume, are without foundation in her
- 24 testimony and, therefore, may be used for reference
- 25 purposes but are not admissible for the truth of the

- 1 matter stated.
- THE COURT: All right. And Staff?
- MR. REDMOND: We have no objection to
- 4 the stipulation.
- 5 MS. MANN: No objections to the
- 6 stipulation.
- 7 THE COURT: All right. Confess some
- 8 concern about the use of the word stipulation given
- 9 the -- the fact of the objection.
- 10 MR. HILL: This is not a stipulation.
- 11 This is a Rule 11 agreement.
- 12 THE COURT: Okay.
- 13 MR. HILL: There is no stipulation as to
- 14 the facts or conclusions which she -- the witness puts
- 15 into her testimony. We don't stipulate to her
- 16 qualification. We stipulate -- we agree that her --
- 17 her qualifications are as she says they are and get
- 18 her no farther than she -- than they get her and are
- 19 subject to argument, are subject to objection or
- 20 preservation. Let me correct that.
- 21 The applicant reserves all right to
- 22 continue his objections to the admission of her
- 23 testimony and reserves all right to point to it as
- 24 error and reserves the right to challenge any -- any
- 25 and all of her conclusions and to make what argument

- 1 we will from her documents and -- and that -- but that
- 2 her testimony is not objectionable for the fact of her
- 3 not having appeared here or been live on the stand or
- 4 subjected herself to cross.
- 5 THE COURT: Okay. And with respect to
- 6 that, I will acknowledge receipt of a Rule 11
- 7 agreement that was handed to me at eleven o'clock this
- 8 morning. And I acknowledge that it bears the
- 9 signatures of counsel for URI, the aligned
- 10 protestants, the executive director, and OPIC.
- And so with that I will -- and subject
- 12 to those objections, I will admit Protestants' Exhibit
- 13 No. 7. It's my understanding that there are no
- 14 similar types of objections with respect to Dr. Kier;
- 15 is that correct?
- MR. HILL: With respect to Dr. Kier, we
- 17 having filed no timely objections to his testimony are
- 18 limited and such -- however that may limit us, and we
- 19 have made no further objections to that.
- THE COURT: And just for purposes of
- 21 clarification of the record, my understanding of the
- 22 executive director's position here is that there is no
- 23 objection.
- MR. REDMOND: Go back to the -- to the
- 25 McFaddin testimony. Our stipulation was to the fact

- 1 that it would be -- that would be her testimony and
- 2 not that we stipulate to the facts contained within
- 3 her testimony. Make that distinction. And we have no
- 4 objection to the Kier stipulation.
- 5 MS. MANN: No objections from OPIC.
- 6 THE COURT: Okay. Fine.
- 7 MR. HILL: Likewise, there's a Rule 11
- 8 agreement to admit the testimony of the witness as his
- 9 testimony without regarding it as conclusive on any
- 10 point.
- 11 THE COURT: I understand. Okay. So
- 12 Protestants' Exhibit No. 6 is admitted subject to
- 13 those objections or clarifications of the manner in
- 14 which the evidence has been offered and admitted.
- MR. HILL: Your Honor, I want to confirm
- 16 that the -- the McFaddin's -- Ms. McFaddin's exhibits,
- 17 apart from her resume, is not admitted for the truth
- 18 of the matter stated but merely to identify documents
- 19 that she said she relied upon. That is of utmost
- 20 importance because there is no predicate for them
- 21 otherwise in her testimony.
- MS. OBERLIN: Your Honor, to the extent
- 23 that -- I think the Rule 11 agreement is controlling
- 24 here. And to the extent that Mr. Hill has objections
- 25 further, I think he'll have an opportunity for those

- 1 later after hearing and briefing and arguments, etc.
- 2 MR. HILL: The Rule 11 agreement says
- 3 that her testimony is what it is and her testimony is
- 4 what it is, 1 through 15, and she has attachments.
- 5 And I find nothing in there that's -- that qualifies
- 6 the attachments for admission for -- for purposes
- 7 other than to identify things she refers to.
- 8 MS. OBERLIN: I guess if Mr. Hill is
- 9 suggesting that none of the parties can ever refer to
- 10 the exhibits --
- MR. HILL: No.
- MS. OBERLIN: -- included for argument
- 13 purposes, the parties cannot cite to the documents
- 14 attached to her prefiled testimony, then I think we
- 15 have a misunderstanding about the nature of that
- 16 Rule 11 agreement.
- 17 THE COURT: I -- I think that there has
- 18 not been a misunderstanding, and -- and I will -- I
- 19 will defer to the parties to tell me whether or not
- 20 there has been a misunderstanding. But let me tell
- 21 you what my understanding of where you-all are now is.
- 22 Item No. 2 in your Rule 11 agreement states as
- 23 follows:
- Each party reserves in its entirety her,
- 25 his, or its right to object to any or all of

- 1 Ms. McFaddin's testimony, except that it may not be
- 2 objected that Ms. McFaddin did not appear to sponsor
- 3 or authenticate her prefiled testimony or that
- 4 Ms. McFaddin did not present herself for
- 5 cross-examination on her prefiled testimony.
- 6 So my understanding of the way things
- 7 stand is as follows: Ms. McFaddin's testimony has
- 8 been offered subject to the right of any party to
- 9 interpose an objection. URI has interposed an
- 10 objection. It now remains for me to rule upon that
- 11 objection.
- 12 And then based upon my ruling, the
- 13 parties will then be able to rely upon that evidence
- 14 as either in the record or not in the record, and I
- 15 will make that ruling at some point after lunch.
- 16 Okay?
- Now, does that change your position,
- 18 Ms. Oberlin?
- MS. OBERLIN: To some degree it does,
- 20 your Honor, because I thought that what we had agreed
- 21 was that the entirety of the binder labeled
- 22 Protestants' Exhibit 7 would be admitted into evidence
- 23 and that -- that I would have the latitude later in
- 24 briefings at the close of these proceedings to refer
- 25 to the exhibits and that Mr. Hill at the close of

- 1 these proceedings would equally have the right to
- 2 refer to those exhibits and say we object to the
- 3 reference of this exhibit because there was no
- 4 predicate laid or whatever -- or whatever and that we
- 5 weren't going to have a ruling at any time today about
- 6 the nature of those documents and they will be in the
- 7 record and that even if Mr. Hill has a problem with
- 8 them later, they're not somehow ripped out of the
- 9 notebook and thrown in the trash can, some such thing.
- 10 THE COURT: Okay. At no point will they
- 11 be ripped out of the notebook and thrown in the trash
- 12 can. Even if I were to rule that -- that these
- documents are not admissible, they still would remain
- 14 part of the record, and -- and they would be there for
- 15 the purpose of the commission or the court to examine,
- 16 to make a determination as to whether or not my ruling
- 17 was appropriate or not.
- 18 MS. OBERLIN: And in addition, I had
- 19 believed that your Honor has already received an
- 20 objection about this prefiled direct testimony,
- 21 including exhibits, and made a ruling on that and so
- 22 that what Mr. Hill is proposing now is a second set of
- 23 objections to prefiled direct testimony. And that
- 24 does not seem appropriate to me.
- THE COURT: And if you'd clarify for me,

- 1 what was your understanding about the ruling that
- 2 preceded this?
- MS. OBERLIN: My understanding is that
- 4 by the scheduling order there was a date by which the
- 5 parties had to object to prefiled direct testimony.
- 6 My understanding is that Mr. Hill made his objection
- 7 timely to the prefiled direct testimony, including
- 8 attachments to the prefiled direct testimony,
- 9 Michelle A. McFaddin, and that, your Honor, at our
- 10 prehearing conference on July 25th over -- well,
- 11 subsequent to that, the last order that was issued in
- 12 this case overruled Mr. Hill's objection.
- 13 THE COURT: Okay. Now I understand what
- 14 you're talking about better. Mr. Hill?
- MR. HILL: Your Honor, I understood that
- 16 Ms. McFaddin's prefiled direct testimony is her 15
- 17 pages of testimony in which -- nowhere in which does
- 18 she purport to adopt or to lay a predicate for the
- 19 offering of her attachments.
- We stipulate -- stipulated or we agreed
- 21 that her credentials were as stated, leaving us to
- 22 argue about it. But I found nothing earlier and I
- 23 find nothing now in her prefile which purports to
- 24 adopt the documents which are attached in the -- in
- 25 the following exhibits as a portion of her testimony

- 1 or to qualify them for admission as business records
- 2 or as official records, nothing.
- 3 Ergo, I did not believe I was on notice
- 4 before nor was I on notice now that they were to be
- 5 admitted as exhibits other than by way of pointing out
- 6 what Ms. McFaddin may have relied upon. Hence, they
- 7 have no independent existence or they are not
- 8 independently established or authenticated as reliable
- 9 or factual or -- or for whatever they are, complete,
- 10 incomplete, whatever.
- 11 THE COURT: Okay. And so let me -- let
- 12 me illustrate my understanding of the gap here. And
- if my illustration is inappropriate or wrong, I'll
- 14 rely on you to let me know. But Ms. McFaddin's
- 15 testimony is contained in these first 15 pages, and if
- 16 at some point Ms. McFaddin says, as she does -- just
- 17 picking up a phrase randomly from page 14 -- that her
- 18 opinion is that URI did not and has not made a
- 19 substantial effort to correct the violations --
- 20 that -- that's Ms. McFaddin's testimony, and it comes
- 21 in for the purpose of her -- of her opinion.
- The document that's found in tab 3 in
- 23 Ms. McFaddin's testimony, that is, in Protestants'
- 24 Exhibit No. 7, is a letter from the Texas Commission
- on Environmental Quality dated October the 7th, 2003.

- 1 This is the letter that talks about URI's compliance
- 2 history score.
- 3 So it's my understanding that Mr. Hill's
- 4 position is, is that this document that is behind tab
- 5 3 does not come into evidence on its own; that is, as
- 6 for the truth of the matter that is stated in the
- 7 document itself.
- 8 So, for example, I as the ALJ could not
- 9 make a proposed finding of fact that the compliance
- 10 history score for Uranium Resources, Inc., is 1.8
- 11 based upon tab 3. Instead what I might be able to
- 12 make a finding of fact on is that Ms. McFaddin
- 13 understood that URI had a compliance history score of
- 14 1.8 based upon a letter from TCEQ.
- So to some degree, this is angels
- 16 dancing on the head of a pin. On the other hand, some
- of this is not. I -- I -- and what I mean is, to some
- 18 degree these are -- this is a -- a substantive
- 19 difference and not just a minor one.
- MS. OBERLIN: I agree that it's
- 21 substantive. And in addition, I would submit that for
- 22 every document relied upon by Ms. McFaddin that I
- 23 would like to rely upon as evidence in this case that
- 24 there are also documents falling under the rule of
- 25 evidence -- Texas Rule of Evidence 9021, domestic

- 1 public documents under seal.
- 2 And unless -- and these documents,
- 3 according to the rule, require -- the rule says
- 4 extrinsic evidence of authenticity as a condition
- 5 precedent to admissibility is not required with
- 6 respect to the following: One, domestic public
- 7 documents under seal.
- 8 And I would submit that these are
- 9 documents that for the most part come with the
- 10 letterhead of the agency and signatures by the agency,
- 11 most of them with a receipt stamp. And unless
- 12 Mr. Hill has some concern about the authenticity of
- 13 the documents relied upon, that in most instances they
- 14 are good evidence that I would like to be able to rely
- 15 upon. And my understanding of the Rule 11 agreement
- 16 was that I would be able to. And so there is a
- 17 serious and substantive misunderstanding if that is
- 18 not the case.
- 19 THE COURT: Okay. Well, perhaps --
- 20 perhaps our time might be better spent with your
- 21 talking off the record about what your agreement is
- 22 and then coming back after lunch and telling me
- 23 whether or not your Rule 11 agreement was entered into
- 24 by misapprehension.
- MS. OBERLIN: Okay.

- 1 THE COURT: And my hope is, is that --
- 2 is that you can work out those differences. I will
- 3 tell you that -- that my inclination -- I'm talking
- 4 just in terms of something that seems reasonable on
- 5 its face, and that's not always what directs or guides
- 6 the law.
- 7 But a letter from the TCEQ dated
- 8 October 7th, 2003, and apparently signed by a
- 9 director, it seems as though ought to be able to come
- 10 in without objection. However, if what the rule
- 11 requires is a seal that is from the clerk of the
- 12 agency and that has not occurred and Mr. Hill wishes
- 13 to rely upon that -- that procedural requirement,
- 14 then -- then that's certainly his right.
- 15 The fact that that -- that is his right
- 16 doesn't prevent you-all from attempting to work out
- 17 your differences at lunch --
- MS. OBERLIN: Okay.
- 19 THE COURT: -- or over a more extended
- 20 period.
- MS. OBERLIN: Okay.
- THE COURT: So my strong recommendation
- is, is that you-all talk.
- MS. OBERLIN: And I would like to point
- 25 out for scheduling purposes that if we cannot work

- 1 this out by the afternoon, then we're going to have a
- 2 change in plan because the ED has requested that he
- 3 puts his direct case on after protestants and
- 4 applicants conclude theirs.
- 5 THE COURT: Okay. And would this affect
- 6 your -- let me back up. How would -- if this change
- 7 were to occur, how would that affect Mr. Santos's
- 8 scheduled testimony?
- 9 MR. REDMOND: We would try to
- 10 accommodate a schedule where certainly there's not a
- 11 gap where we have an afternoon with no -- with nothing
- 12 to do. I would suggest we reserve the right to recall
- our witness if there's something that comes up in the
- 14 protestants' direct case that we would determine we
- 15 need to continue our own direct case.
- 16 THE COURT: You have my thanks. I
- 17 appreciate it.
- 18 Finally, let's just -- let's just look
- 19 quickly at what's contained in Ms. McFaddin's
- 20 exhibits. I see item No. 3, tab 3, is this letter
- 21 from the TCEQ. Tab 4, although not on letterhead,
- 22 appears to be a compliance summary generated by TCEQ.
- MR. REDMOND: Before TCEO --
- THE COURT: Right, to TNRCC.
- MR. REDMOND: -- predecessor.

- 1 THE COURT: But I'm assuming this --
- 2 this appears to be a TNRCC document. Am I -- am I
- 3 incorrect at least in terms of what it appears to be?
- 4 MR. HILL: It purports to be that,
- 5 although what we don't know is whether that's the last
- 6 version or --
- 7 THE COURT: Right. Right.
- 8 MR. HILL: -- whether there was anything
- 9 attached or preceding or --
- 10 THE COURT: Which is what the purpose of
- 11 the seal is.
- MR. HILL: Yes.
- THE COURT: Right. And --
- MR. HILL: Unlike 3, which says working
- 15 copy. I don't know whether that's on the original or
- 16 on the copy.
- 17 THE COURT: Right. Okay. And so
- 18 similarly with 5 and 6 --
- MR. HILL: 5 appears to be a couple of
- 20 documents, and again we don't know.
- THE COURT: Okay.
- 22 MR. HILL: We also don't know whether
- 23 they are two of a series of three or more or whether
- 24 they are two entirely separate and -- and complete
- 25 documents.

- 1 THE COURT: Right. And then 7.
- 2 MR. HILL: More.
- 3 MR. REDMOND: Tab 7 is an identical
- 4 exhibit to an exhibit Executive Director plans to
- 5 offer.
- 6 THE COURT: Okay. And I note that it
- 7 includes a document from the state of New Mexico for
- 8 whatever that's -- whatever impact that might have.
- 9 And then tab 8, we're dealing with the Texas
- 10 Department of Health, a letter from them.
- 11 Tab 9 is TNRCC letterhead document.
- 12 Looks like a letter. 10 is TDH. 11 is TNRCC. 12 is
- 13 TNRCC. 13 is the same. 14 is TCEQ. 15, we finally
- 14 get to a URI letter on URI letterhead. 16 appears to
- 15 be TCEQ. 17, TCEQ, same with 18. 19 is a host of
- documents or perhaps just one long document, 124
- 17 pages' worth.
- 18 MR. HILL: If you believe that number.
- THE COURT: Page 20 is more TCEQ. 21 is
- 20 the same.
- MR. HILL: I note that part of 19 is
- 22 double-sided. Part is not.
- THE COURT: Okay. 23 is URI. 24 is an
- 24 agreement.
- MS. OBERLIN: This agreement is also

- 1 part of Mark Pelizza's direct testimony.
- THE COURT: Okay. So --
- MS. OBERLIN: Or, actually, I'm not sure
- 4 of that.
- 5 THE COURT: So, I mean, it sounds as
- 6 though there's some overlap and perhaps some room for
- 7 discussion, so -- it's 12:25. What do you say we be
- 8 back here at 1:45? And that will give you a little
- 9 more time to talk. And if you need additional time,
- 10 let me know.
- MS. OBERLIN: Thanks.
- 12 THE COURT: We're off the record.
- 13 (Lunch recess from 12:22 p.m. to 1:46 p.m.)
- 14 THE COURT: The time is approximately
- 15 1:45, and Ms. Oberlin would like to make a statement.
- MS. OBERLIN: Your Honor, the
- 17 Protestants rest their direct case.
- 18 THE COURT: Thank you very much. At
- 19 this time would the ED like to begin their case in
- 20 chief?
- MR. REDMOND: Yes, your Honor. And we
- 22 have provided all the parties some extra exhibits that
- 23 we plan to offer, as well as our prefiled exhibits,
- 24 and a document that lists all of the Executive
- 25 Director's exhibits that are labeled TCEQ numbers.

Page 61

- 1 THE COURT: Thank you very much.
- 2 MR. REDMOND: At this point the -- the
- 3 Executive Director, I would like to call John Santos.
- 4 (The witness was sworn)
- JOHN J. SANTOS, P.G.,
- 6 having been first duly sworn, testified as follows:
- 7 DIRECT EXAMINATION
- 8 BY MR. REDMOND:
- 9 Q. Please state your name for the record.
- 10 A. John J. Santos.
- 11 Q. Can you identify the documents labeled TCEQ
- 12 36?
- 13 A. Oh, yes. This is my prefiled testimony.
- 14 Q. Do you have any corrections to your prefiled
- 15 testimony?
- 16 A. After my name on the first page, it says
- initials P.E., and it should be P.G. for professional
- 18 geologist, not professional engineer.
- 19 Q. You are not a professional engineer?
- 20 A. That's correct.
- O. With that correction would this written
- 22 testimony be your testimony given -- given live here
- 23 today?
- 24 A. Yes, it would.
- MR. REDMOND: Executive Director offers

- 1 TCEQ 36 and TCEQ Exhibits 20 through 35.
- THE COURT: Mr. Hill, are there any
- 3 objections?
- 4 MR. HILL: None, your Honor.
- 5 THE COURT: Ms. Oberlin?
- 6 MS. OBERLIN: No, your Honor.
- 7 MS. MANN: No.
- 8 THE COURT: And then from OPIC. The
- 9 exhibits as stated are admitted.
- 10 Q. (By Mr. Redmond) Mr. Santos, can you
- identify the exhibit marked TCEQ 37?
- 12 A. Yes. This is a notice of receipt for
- 13 application for production area authorization UR02827
- 14 No. 3.
- MR. REDMOND: Executive Director offers
- 16 TCEQ Exhibit 37.
- 17 THE COURT: Any objection, Mr. Hill?
- MR. HILL: None, your Honor.
- 19 THE COURT: Ms. Oberlin?
- MS. OBERLIN: No.
- MS. MANN: None.
- THE COURT: None. Exhibit 30- -- or
- 23 excuse me. TCEQ Exhibit 36 (sic) is admitted into the
- 24 record.
- Q. Can you identify the exhibit marked TCEQ 38?

- 1 A. This is a revised copy of the production area
- 2 authorization No. 3.
- 3 Q. Can you describe the differences in this
- 4 draft from the version that was included with your
- 5 prefiled testimony?
- A. Yes. The name of the agency is updated to
- 7 Texas Commission on Environmental Quality. On the
- 8 bottom of the first page, was added or until
- 9 revocation of the area Permit No. UR02827-001. On
- 10 page 3 No. E under provision 4 has been made a
- 11 stand-alone provision. And also the name of the Texas
- 12 State Health Services -- Texas Department of State
- 13 Health Services has been updated.
- MR. REDMOND: Executive Director offers
- 15 TCEO Exhibit 38.
- THE COURT: Any objections, Mr. Hill?
- 17 MR. HILL: I have no objections. But
- 18 page 4, the units listed for alkalinity and pH are
- 19 standard units. Can we just delete that reference and
- 20 say they are -- they have no units?
- I'll suggest to the witness that pH
- 22 and -- well, certainly, pH. Alkalinity may be a
- 23 titration method -- certainly, pH is an exponent. It
- 24 has no unit; is that right?
- MR. REDMOND: Your Honor --

Page 64

- 1 THE WITNESS: I can agree with that,
- 2 yes.
- 3 MR. REDMOND: -- that's --
- 4 MR. HILL: It's an objection to the
- 5 document. I don't know -- I would -- I question
- 6 whether he'd be willing to offer the document with
- 7 that change -- that change aside.
- 8 MR. REDMOND: I would suggest -- explore
- 9 it on cross-examination.
- 10 THE COURT: I agree.
- 11 And I'll -- I'll overrule your objection
- 12 and permit you to cross-examine the witness on that
- 13 point.
- So other than that, are there any
- 15 objections?
- MR. HILL: None. None.
- 17 THE COURT: Ms. Oberlin?
- MS. OBERLIN: No, sir.
- MS. MANN: None.
- THE COURT: Ms. Mann, none. The exhibit
- 21 is admitted.
- 22 Q. (By Mr. Redmond) Can you identify the
- 23 exhibits marked TCEQ 39 and TCEQ 40?
- 24 A. Yes. These are revised permits for the waste
- 25 disposal wells.

- 1 Q. Can you describe the changes in these
- 2 documents from the versions included in your prefiled
- 3 testimony?
- A. The name of the agency has been updated to
- 5 Texas Commission on Environmental Quality. And under
- 6 provision 6-D, the word not has been added so that the
- 7 injection fluid shall not be greater than 1.014.
- 8 MR. REDMOND: Executive Director offers
- 9 TCEO Exhibits --
- 10 A. There's -- there's one additional change.
- 11 Q. Pardon.
- 12 A. On page 9 the name of the Department of State
- 13 Health Services has also been updated.
- 14 Q. Are there any other changes?
- 15 A. That's all.
- MR. REDMOND: Executive Director offers
- 17 Exhibits TCEO 39 and TCEO 40.
- THE COURT: Mr. Hill, any objection?
- MR. HILL: None.
- THE COURT: Ms. Oberlin?
- MS. OBERLIN: None.
- THE COURT: Ms. Mann?
- MS. MANN: None.
- THE COURT: TCEO Exhibits 39 and 40 are
- 25 admitted.

- 1 Q. (By Mr. Redmond) Can you identify the
- 2 exhibit marked as TCEQ 41?
- 3 A. This is a letter to Ms. Dawn Burton of the
- 4 Texas Commission on Environmental Quality from Carola
- 5 Serrato of the South Texas Water Authority.
- 6 Q. Do you desire the record to reflect the
- 7 comments contributed to Ms. Serrato in the Executive
- 8 Director's response to comments that were submitted on
- 9 behalf of the South Texas Water Authority?
- 10 A. Yes, I do.
- 11 MR. REDMOND: Executive Director offers
- 12 Exhibit TCEQ 41.
- THE COURT: Mr. Hill?
- MR. HILL: No objection.
- 15 THE COURT: Ms. Oberlin?
- MS. OBERLIN: No objection.
- 17 THE COURT: Ms. Mann?
- MS. MANN: No objections.
- MR. REDMOND: We pass our witness.
- THE COURT: And Exhibit 41 is admitted.
- 21 And Mr. Santos is now available for cross-examination
- 22 by Mr. Hill.
- 23 CROSS-EXAMINATION
- 24 BY MR. HILL:
- Q. Mr. Santos, I refer you to Attachment A on

- 1 page -- which is page 4 of TCEQ 38. Would the
- 2 Executive Director be amenable, and if so -- well, let
- 3 me ask. Would you recommend in case the Executive
- 4 Director were amenable that the pH units be indicated
- 5 to be unitless to reflect the fact --
- 6 A. Do you -- do you mean just leave a blank in
- 7 there?
- 8 Q. Either that or put unit -- unitless because
- 9 it is a pure number.
- 10 A. I don't have any objection to that.
- 11 Q. Do you understand the rationale for that
- 12 change?
- 13 A. Yes, I do.
- 14 Q. Thank you. Would the same hold true for any
- 15 other reference to pH where units were given or
- indicated by an abbreviation such as S, period, U,
- 17 period?
- 18 A. Yes, it would.
- 19 Q. Thank you. In the event that the recommended
- 20 production area authorization would -- were appearing
- 21 to authorize a restoration table any limits of which
- 22 for any parameter fell outside of Table 2 of the area
- 23 permit, the restoration range table -- does -- is the
- 24 Executive -- could you recommend to the Executive
- 25 Director that the applicant not be authorized to have

- 1 a restoration table which granted any relief from the
- 2 limits of the restoration table in the area permit?
- 3 A. I'm not -- not sure I follow your question.
- 4 O. All right. You understand that the area
- 5 permit to which we refer in this case is URO or 0
- 6 2827?
- 7 A. Yes.
- 8 Q. And you're familiar that that permit contains
- 9 or includes a Table 2 which is a restoration range
- 10 table. Do you recall that?
- 11 A. Yes.
- 12 Q. And do you -- I see that you are looking at a
- 13 document. Perhaps that is the right one. If so,
- 14 would you look at it to ascertain that the table
- 15 contains limits for a number of parameters which are
- 16 both chemical species -- or either chemical species or
- 17 properties of chemical species or solutions?
- 18 A. When you say restoration range table, you're
- 19 talking about the table in the area permit?
- 20 Q. In the area permit, yes.
- 21 A. Okay.
- Q. Would you be able to recommend to the
- 23 Executive Director that the production area
- 24 authorization which is here sought by URI, if granted,
- 25 should not grant relief from restoration table limits

- 1 which were more stringent than -- more stringent than
- 2 those in the PAA -- pardon me -- more stringent --
- 3 it would not grant relief from the -- from the
- 4 restoration values which are in the area permit range
- 5 table?
- 6 A. Let me try this. My understanding of the
- 7 restoration range table in the permit is that if any
- 8 restoration values go outside that range table, a
- 9 hearing would be necessary to make a change.
- Now, a change to the restoration table
- in the PAA would be a major amendment to the PAA and
- 12 would require notice and a opportunity for hearing.
- 13 Does that answer your question? I'm still not sure
- 14 exactly what you meant.
- 15 Q. All right. What I'm looking for is this:
- 16 URI does not seek by its application for PAA3 to be
- 17 granted an authorization which seems to authorize it
- 18 to restore to values that are more lenient than those
- 19 which are required by the area permit.
- 20 A. Okay.
- Q. You understand?
- 22 A. My understanding of the table in the range --
- 23 in the area permit is that it doesn't have any effect
- 24 on restoration limits in the PAA unless they are --
- 25 tried to be amended.

- 1 Q. Well, in the event others should understand
- 2 otherwise, do you have any objection or would you
- 3 recommend any objection on the Executive Director's
- 4 behalf if URI does not ask for and -- and declines to
- 5 accept latitude in PAA3 to rely upon restoration
- 6 values which are more lenient than those set out in
- 7 the restoration range table in the -- in the
- 8 underlying permit?
- 9 A. I wouldn't -- I wouldn't make any
- 10 recommendations.
- 11 Q. You would not make a recommendation?
- 12 A. Involving the restoration range table.
- 13 Q. Would you -- would you then -- would you
- 14 recommend against that?
- 15 A. I'm sorry. I'm still -- you're going to have
- 16 to use simpler words --
- 17 Q. All right.
- 18 A. -- for me to understand, I'm afraid.
- 19 Q. Well, let me step back to the -- the area
- 20 permit -- would you agree the area permit is unusual
- 21 in that it contains a restoration range table?
- 22 A. Yes.
- 23 Q. Have you ever seen any area permit before
- 24 that contained a restoration range table?
- 25 A. No.

- 1 Q. Okay. Do you agree with me that the
- 2 restoration range table purports to say that no
- 3 restoration authorized for any place within the permit
- 4 area authorized by the area permit shall fall outside
- 5 of the restoration range table set out in the area
- 6 permit?
- 7 A. Let me see if I understand what you're
- 8 asking. If you're saying that the -- that the
- 9 restoration range table can be interpreted to require
- 10 that all restoration values fall inside that table --
- is that what your question is?
- 12 Q. My -- my question, is that what it seems to
- 13 do, is to require --
- 14 A. And I would say no, it does not.
- 15 Q. All right. All right. All right. Let me
- 16 call your attention, if I may, then, to Attachment A
- in Exhibit TCEQ 38. Do you have that before you?
- 18 A. 38, yes.
- 19 Q. Page 4, Attachment A, the restoration table.
- 20 A. Yes.
- 21 Q. Let me call your attention, if I may, to the
- 22 sodium parameter --
- 23 A. Okay.
- Q. -- and the concentration limit, which I read
- 25 to be 404 milligrams per liter.

- 1 A. Yes.
- Q. Do you see that entry, and have I read it
- 3 correctly?
- 4 A. Yes, you have.
- 5 Q. Now, let me ask you to refer to the area
- 6 permit restoration range table.
- 7 A. I don't have a copy of that.
- 8 Q. You don't have it. All right.
- 9 A. I have a copy of my own if you want me to get
- 10 that.
- 11 Q. That'll be fine. I believe it is also
- 12 reproduced in Exhibit 4 in this proceeding, so --
- 13 A. Okay.
- 14 Q. You're certainly invited to pull up your own
- 15 copy if you have it and are willing to do so. If you
- 16 have your copy handy, let me ask you to refer to it.
- MR. REDMOND: We have a copy.
- MS. OBERLIN: Okay. I have that located
- 19 in Exhibit 4.
- Q. (By Mr. Hill) Now, referring again in that
- 21 Table 2, for the record, I believe that this -- the
- table we're referring to appears at the end of the
- 23 permit, which is attached at the end of URI Exhibit --
- I believe it's Exhibit 3. It may also reappear in
- 25 Exhibit 4.

- 1 A. Okay.
- 2 O. What is the sodium concentration limit
- 3 indicated in the range table which appears in the area
- 4 permit?
- 5 A. The low value is 288. The high value is 352.
- 6 Q. So do you -- do you -- would you agree with
- 7 me that the 352 shown as the high value for sodium
- 8 concentration -- that's in milligrams per liter --
- 9 is less than the high value concentration, 404
- 10 milligrams per liter, contained in Attachment A of the
- 11 restoration table of proposed PAA3?
- 12 A. Yes.
- 13 Q. All right. Now, is it your under- -- what is
- 14 your understanding as to which of these values is the
- 15 upper limit at which URI may claim restoration to have
- 16 been achieved as to sodium ions?
- 17 A. The limit in the draft PAA, 404.
- 18 O. Is it the Executive Director's view that it
- 19 is permissible to authorize URI to claim restoration
- 20 at the level of 404 milligrams per liter of sodium
- 21 within PAA3 even though the Table 2 of the area permit
- 22 contains a lower value as the upper limit for sodium
- 23 concentration for restoration?
- 24 A. Yes.
- Q. All right. Now, the same question as to the

- 1 next line down, potassium. Would you agree with me
- 2 that the potassium concentration which would be
- 3 authorized under the restoration table attached to
- 4 PAA -- draft PAA3 is 16 milligrams per liter?
- 5 A. Yes.
- 6 Q. And what is the entry you find in the area
- 7 permit in the range table?
- 8 A. The low value is 4.72, and the high value,
- 9 12.1.
- 10 Q. Would you give us -- is it your -- is your
- 11 answer the same that the production area authorization
- 12 which would seem to authorize URI to claim restoration
- with regard to potassium ions at a concentration of 16
- 14 milligrams per liter controls over the lesser limit in
- 15 Table 2 of the area permit?
- 16 A. Yes.
- 17 Q. Well, let me ask you the same question now
- 18 with regard to alkalinity. That is to say, will you
- 19 compare the concentration which is given in the
- 20 restoration table of TCEQ Exhibit 38 with the -- the
- 21 concentration or the value for the comparable
- 22 parameter in the area permit?
- 23 A. Okay.
- Q. What is the alkalinity limitation in the area
- 25 permit of restoration range table, the upper limit?

- 1 A. The upper -- you want the values in the range
- 2 table for alkalinity? Is that what --
- 3 Q. Yes.
- 4 A. Okay. The low value is 205. The high value
- 5 is 444.
- 6 Q. Okay. So that in that case, alkalinity falls
- 7 below -- falls within the range or below it?
- 8 A. It falls below the range.
- 9 Q. All right. Do you consider that the
- 10 production area authorization which is here proposed,
- 11 therefore, is more limiting or more lenient in regard
- 12 to alkalinity?
- 13 A. It's -- it's more limiting.
- 14 Q. All right. The same question, then, with
- 15 regard to the entry for pH on the next line. Am I
- 16 correct to note that in the proposed production area
- 17 authorization, the permissible range of pH is 6 on the
- 18 low side to high -- 9 on the high side?
- 19 A. That's right.
- 20 Q. And what is the range authorized by the -- or
- 21 that is mentioned in the range table attached to the
- 22 area permit?
- 23 A. The low is 7.37, and the high is 9.5.
- Q. Do you understand that the production area
- 25 authorization which is here proposed authorizes a more

- 1 lenient limit on the low side and a more constraining
- 2 limit on the high side with regard to pH than does the
- 3 area permit?
- 4 A. Yes, that's right.
- 5 Q. Okay. Is there some reason for the agency to
- 6 change its recommendations or requirements in this
- 7 regard between the -- the area permit and the
- 8 production area authorization, or is this just the
- 9 result of calculating restoration values in the -- and
- 10 mechanical way prescribed by commission rules and the
- 11 permit language in question?
- 12 A. The -- the values in the draft PAA were
- derived according to the agency's rules.
- 14 Q. Do you see any conflict, then, between the
- 15 difference in the permissible range on the one
- 16 instrument, the PAA, and the other instrument, the
- 17 area permit?
- 18 A. What do you mean by conflict?
- 19 Q. Do you see that they seem to authorize and by
- 20 implication require performance within different
- 21 ranges which do not coincide?
- 22 A. I don't -- I don't think they conflict
- 23 because I don't think the restoration range table is
- 24 set up to determine limits for production area
- 25 authorizations.

- 1 Q. What do you understand to be the function of
- 2 the range table?
- 3 A. I think it's stated in the permit.
- 4 Q. Okay.
- 5 A. I'd have to find it and read it. On
- 6 provision 7-P, I believe it is.
- 7 Q. Go ahead.
- 8 A. And it -- I'm not very good at reading things
- 9 out loud. I have a -- I have a problem with
- 10 dyslexia -- what it says.
- 11 Q. Well, Mr. Santos, then, let me make this a
- 12 little bit easier. Would you give us a reference to
- 13 the provision of the area permit UR02827 where you
- 14 find the language you want to --
- 15 A. It's on page 9. It's No. P, provision P.
- 16 O. P as in Patrick?
- 17 A. Yes.
- 18 Q. All right. And what do you take to be the
- 19 gist of that?
- 20 A. I take it that any modification of a
- 21 restoration table that falls outside of the range
- 22 would require published notice and opportunity for a
- 23 hearing. And then it gives a reference for the
- 24 hearing. I don't know if that's the current one.
- 25 Q. Do you -- do you know what the Executive

- 1 Director's understanding is as to whether or not the
- 2 hearing which has been held on PAA3 suffices to meet
- 3 that requirement such that the requirement set out in
- 4 the restoration range table of PAA3 can now become
- 5 controlling?
- 6 A. No. That situation would require an
- 7 additional hearing. And it would require a hearing
- 8 anyway because a major amendment to -- would require
- 9 notice and opportunity for hearing. A change to the
- 10 restoration table would be a major amendment.
- 11 Q. What I'm referring to, however, is a change
- 12 to the restoration table, meaning the restoration
- 13 table in the production area authorization --
- 14 A. Yes.
- 15 Q. -- as opposed to a change in the restoration
- 16 levels authorized in the area permit.
- 17 A. Yes, a change to the --
- 18 Q. Okay.
- 19 A. -- table in the draft permit -- I mean, draft
- 20 PAA.
- 21 Q. Let me direct your attention now to another
- 22 matter. I have here a document that has a good bit of
- 23 handwriting on the face of it but which is also a
- 24 printed document, and I wanted to ask you if you
- 25 recognize it.

- 1 MR. HILL: If I may approach the witness
- 2 now.
- 3 THE COURT: Yes.
- 4 Q. (By Mr. Hill) Mr. Santos, I'm going to show
- 5 you a document with a green cover and ask you if you
- 6 recognize what that document is or was before it had a
- 7 lot of handwriting on it.
- 8 A. Yes, I recognize it.
- 9 Q. Do you recognize that document as a
- 10 publication of the former Texas Department of Health?
- 11 A. Yes.
- 12 Q. Have you seen that and/or similar documents
- 13 before?
- 14 A. I have seen this -- a copy of this one before
- 15 and other -- other ones.
- 16 Q. Do you have any reason to believe that --
- 17 that documents of that type are any -- anything other
- 18 than issued -- than what they purport to be issued by
- 19 the Texas Department of Health?
- 20 A. No.
- 21 Q. Okay. I'd like to ask you to refer now to
- 22 the section which is marked with a red tab and glance
- 23 at it briefly to see if you are familiar with the
- 24 information in that. I think it's a series of six to
- 25 ten pages.

- 1 A. Okay.
- 2 Q. What is the subject matter of the piece that
- 3 I have just asked you to consider to refer to?
- 4 A. Texas geological history and uranium
- 5 deposition.
- 6 Q. Do you understand this material to be a -- a
- 7 very short concise account of how -- through what
- 8 geologic processes or meteorological processes uranium
- 9 came to be found in Texas or came to be located in
- 10 Texas?
- 11 A. Yes.
- 12 Q. Okay. Would you consider this information to
- 13 be a -- to be reliable information as a concise
- 14 account of the answer to the question how -- how did
- 15 uranium come to be located in Texas?
- 16 A. Yes, I would.
- 17 Q. All right, sir.
- 18 MR. HILL: Your Honor, I'd like to
- 19 request an exhibit number for the extract identified
- 20 as Appendix D of the environmental assessment, safety
- 21 evaluation report, and proposed licensed conditions
- 22 related to the Uranium Resources, Inc., Kingsville
- 23 Dome Project, Kleberg County, Texas, published by the
- 24 Bureau of Radiation Control, Texas Department of
- 25 Health, July 16, 1985.

- I have showed -- shown the document to
- 2 counsel and will provide copies shortly and offer --
- 3 would like to offer it into evidence as an extract of
- 4 an official record as to which the whole of the record
- 5 is available for inspection.
- THE COURT: Any objections?
- 7 MR. REDMOND: What is the exhibit
- 8 number?
- 9 THE COURT: He's -- I have the next
- 10 exhibit number. And if we just -- if we just go in
- 11 sequence, I believe the next one would be 44.
- MR. HILL: That's my record as well.
- 13 That would be URI 44. I will for the moment
- 14 tentatively clip it to this document and then affix
- 15 the 44 label to the document when it is copied and
- 16 available.
- 17 THE COURT: Thank you. Any objection?
- 18 MS. OBERLIN: Do I object first
- 19 nowadays, or is it the ED?
- THE COURT: You know, I'm sorry. I
- 21 was -- I'm out of order, and your correction is
- 22 well-taken.
- MR. REDMOND: I have no objection.
- 24 THE COURT: All right.
- MS. MANN: Go, Melanie.

- 1 MS. OBERLIN: Okay. I'm not sure
- 2 that -- I object on the grounds that I don't think a
- 3 proper predicate has been laid. He hasn't asked
- 4 Mr. Santos -- Mr. Santos and -- as an expert has
- 5 relied on this document.
- And this is the exact type of document
- 7 that we argued about before and couldn't agree that
- 8 without an official seal that the document was
- 9 self-authenticating, so I'm -- I object on those
- 10 grounds.
- THE COURT: And OPIC?
- MS. MANN: I was --
- MR. HILL: Would you like to see the
- 14 document?
- MS. MANN: I believe -- I believe this
- is a similar document as we had been referring to or
- 17 had been questioning earlier and would need -- it's
- 18 not -- I don't -- it's not self-authenticating and --
- 19 because it isn't under seal.
- However, I -- if -- if someone is able
- 21 to authenticate it, then OPIC would not object, but
- 22 right now I would have to agree with Ms. Oberlin.
- THE COURT: Okay. Well, I don't think
- 24 we have anybody present from the Department of
- 25 Economic Geology, so --

- 1 MR. REDMOND: Your Honor, I'd like to
- 2 add that in commission proceedings, Texas Rules of
- 3 Evidence are generally used. But in Commission Rule
- 4 80.127, there is an additional provision that when
- 5 necessary to ascertain facts not reasonably
- 6 susceptible proof under those rules, evidence not
- 7 admissible under those rules may be admitted except
- 8 where precluded by statute if -- if it is the type
- 9 commonly relied upon by reasonably prudent people in
- 10 the conduct of their affairs.
- 11 And it sounds like this -- this evidence
- is something that you were particularly looking for in
- 13 earlier examination. So I think that as far as
- 14 developing the record, I think there can be other
- 15 people who would want to see that type of information
- 16 in the record.
- 17 And so I would just offer that
- 18 Commission rule that adds some inclusion of evidence
- 19 beyond the Texas Rules of Evidence.
- 20 THE COURT: Okay. Thank you. This --
- 21 the focus then goes back to you, Ms. Oberlin.
- MS. OBERLIN: I agree with the Executive
- 23 Director's assertion also that Mr. Hill has witnesses
- 24 who may be more appropriate for entering this document
- 25 and that because John Santos hasn't testified that

- 1 he's ever relied on it or bases any of his own opinion
- 2 testimony that -- given here today on the document, I
- 3 don't think it's appropriate for admission into the
- 4 record at this time.
- 5 THE COURT: Okay. I confess that I
- 6 believe that I'm the one that's the source of the
- 7 problem in this instance since I asked the question of
- 8 the previous witness without the source of uranium in
- 9 Texas. It was admittedly a question more for my
- 10 information about how this geological presence came to
- 11 be here.
- I'll -- I'm going to overrule your
- objection. I'll allow -- I'll admit the document into
- 14 evidence. And the basis of my ruling is the provision
- 15 that Mr. Redmond has cited.
- 16 I'll tell you that my purpose in -- in
- 17 seeking this information is simply to provide some
- 18 background information about uranium generally and --
- 19 and nothing having to do specifically with the
- 20 application that has been submitted by URI.
- 21 So I think it's fairly benign in terms
- 22 of its presence in the record. With that, you may
- 23 continue your cross-examination.
- MR. HILL: Thank you, Your Honor.
- 25 Subject to providing counsel with copies of Exhibit

- 1 No. 44 when they become available later this
- 2 afternoon, if I may.
- 3 Q. (By Mr. Hill) Mr. Santos, I'd like to show
- 4 you a document which as yet has no identification, but
- 5 I will tentatively identify it as URI Exhibit 45,
- 6 which bears a cover page titled Report 291,
- 7 Underground Injection Operations in Texas,
- 8 Classification and Assessment of Underground Injection
- 9 Activities published -- ostensibly published by the
- 10 Texas Department of Water Resources in December of
- 11 1984. And I ask you, do you recognize that
- 12 publication?
- 13 A. Yes, I do.
- 14 Q. I ask you to tell me if you recognize the
- 15 name of the principal investigator who produced that
- 16 document.
- 17 A. Would that be Ben Knape?
- 18 Q. I would know only if you know, sir.
- 19 A. It says in -- on the first page compiled by
- 20 Ben Knape.
- 21 Q. Do you recognize the seal which appears on
- 22 the first page and on the cover of that document?
- 23 A. Yes, I do.
- 24 O. What is it?
- 25 A. It's the seal of the State of Texas.

- 1 Q. And what is the -- is there a state agency
- 2 name printed on the cover of the document and on the
- 3 first page?
- 4 A. Yes, Texas Department of Water Resources.
- 5 Q. Is Texas Department of Water Resources a
- 6 predecessor agency of the Texas Commission on
- 7 Environmental Quality?
- 8 A. Yes, it is.
- 9 Q. Let me refer you to Chapter 4 in that
- 10 publication and ask you if you recognize the name of
- 11 the person who was the author.
- 12 A. Chapter 4?
- 13 O. Yes.
- 14 A. Yes, I recognize that name.
- 15 Q. Who is that?
- 16 A. Dale P. Kohler.
- 17 Q. Was Mr. Kohler present for the first two days
- 18 of this hearing?
- 19 A. Yes, he was.
- Q. Is he still in the employ of the agency?
- 21 A. Yes.
- 22 Q. Do you recognize the subject matter of that
- 23 chapter?
- 24 A. Yes, I do.
- 25 Q. Have you reviewed that chapter at any time

- 1 before?
- 2 A. Yes, I have.
- 3 Q. Do you regard the information in that chapter
- 4 as helpful and useful -- a useful summary of uranium
- 5 operations in Texas in general as of at least the date
- 6 of publication?
- 7 A. Yes.
- 8 Q. Do you believe that information of that sort
- 9 would be useful background information for -- for use
- 10 by the commission or the judge in the consideration of
- 11 the matters in this case?
- 12 A. Yes.
- O. Okay. Let me ask you: What is the extent of
- 14 Chapter -- of that chapter in terms of pages? About
- 15 20?
- 16 A. 21 pages.
- 17 Q. All right. Now, I hand you what I will
- 18 suggest to you, but ask you to confirm, is a faithful
- 19 photocopy of that -- of the chapter you've just
- 20 identified, with the exception of the title page.
- 21 Would you notice that the title page of the -- compare
- 22 the title page of the document I've handed you with
- 23 the one in the xerox copy I've given you.
- 24 A. The title page has some additional writing on
- 25 it.

- 1 Q. Do you recognize the additional writing on
- 2 the photocopy of the title page?
- 3 A. Recognize it as -- how do you mean recognize
- 4 it?
- 5 Q. Do you have any idea what it is or how it
- 6 qot --
- 7 A. It looks like something that a library would
- 8 put on it.
- 9 Q. Any particular library you can think of?
- 10 A. It -- it does say TNRCC library.
- 11 Q. And what do you take TNRCC to mean?
- 12 A. That would be -- would mean the -- what is
- 13 our -- our commission library.
- 14 Q. The predecessor of TCEQ, would that be
- 15 correct?
- 16 A. That's -- that's correct.
- 17 Q. All right, sir. And aside from that page, is
- 18 the rest of it -- does the rest of it appear to be a
- 19 fair copy of the pages of Chapter 4 of Report 291 that
- 20 you've just spoken of?
- 21 A. Yes, it does.
- Q. Okay. And I will represent to you that I
- 23 also believe it to be a fair copy of the same thing.
- 24 Let me --
- MR. HILL: Your Honor --

- 1 THE COURT: Yes.
- 2 MR. HILL: Can we go off the record
- 3 while the document circulates?
- 4 THE COURT: Yes.
- 5 (Off the record)
- 6 MR. HILL: I have shown the document
- 7 identified as URI 45 to counsel, and I have shown the
- 8 Report 291, which I previously was discussing with the
- 9 witness, to counsel. And I will now offer the extract
- 10 of document Report 291, Chapter 4 of it, into evidence
- 11 in the proceeding.
- 12 THE COURT: Are there any objections?
- MR. REDMOND: No objection.
- MS. OBERLIN: No objection.
- MS. MANN: No objection.
- 16 THE COURT: The document is admitted.
- MR. HILL: Pass the witness.
- THE COURT: Ms. Oberlin.
- 19 CROSS-EXAMINATION
- 20 BY MS. OBERLIN:
- Q. Mr. Santos, you've been at TCEQ for about 10
- 22 or 11 years?
- 23 A. That's correct.
- Q. And you're a geologist at TCEQ?
- 25 A. Yes.

- 1 Q. And you work in the underground injection
- 2 control team?
- 3 A. Yes.
- 4 Q. And are you the person at TCEQ who has been
- 5 in charge of reviewing the PAA3 authorization
- 6 application and the permit renewals for WDW-248 and
- 7 247 applications?
- 8 A. Yes.
- 9 Q. Has anyone else done substantial work on
- 10 those applications that -- in reviewing the
- 11 applications?
- 12 A. No.
- 13 Q. And you did your technical review of the
- 14 production area application in 1997?
- 15 A. Yes.
- 16 Q. Okay. Did you draft the original production
- 17 area authorization in 1997?
- 18 A. Yes.
- 19 Q. Okay. Did you draft a second draft area
- 20 permit authorization in 2000?
- 21 A. Yes.
- 22 Q. Do you know how many active area permits
- 23 there are in the state of Texas?
- 24 A. Yes.
- 25 Q. Is that about six active area permit

- 1 applications?
- 2 A. That sounds correct, yes.
- 3 Q. And is it your testimony that in your time at
- 4 the TCEQ, you've worked on approximately 23 production
- 5 area authorizations?
- 6 A. That's correct.
- 7 Q. And is it correct that approximately three
- 8 different companies hold all of the permits for mining
- 9 of uranium in the state of Texas?
- 10 A. That's correct.
- 11 Q. Is it also true that production area
- 12 authorizations are unique to the uranium mining
- 13 industry?
- 14 A. Yes.
- 15 Q. Is the production area authorization at issue
- 16 here unusual in the length of time that it has taken
- 17 to proceed through the agency?
- 18 A. Yes, it is.
- 19 Q. And is that because it was issued and then
- 20 remanded?
- 21 A. Yes.
- Q. And even after the remand, hasn't the time
- 23 that it's taken to be processed through the agency
- longer than in other permit area authorizations you've
- 25 worked on?

- 1 A. Yes, that's right.
- Q. Is the average length of time it takes to
- 3 process an area authorization approximately one to one
- 4 and a half years at the agency?
- 5 A. That -- that would be correct, yes.
- 6 Q. And in this case we're working from a draft
- 7 permit that you drafted in the year 2000?
- 8 A. Yes, that's right.
- 9 Q. Okay. By the time you began working at the
- 10 TCEQ, URI already held the area permit UR02827; is
- 11 that correct?
- 12 A. That's correct.
- 13 Q. Okay. And you did not personally work on
- 14 that application because you were not at the agency,
- 15 correct?
- 16 A. That's correct.
- 17 Q. Okay. And do you know how the restoration
- 18 table that's in area -- in the area permit was
- 19 created?
- 20 A. No, I don't.
- Q. Okay. And you recognize that a restoration
- 22 range table --
- MR. HILL: Excuse me. I'm one question
- 24 behind. I believe the attorney asked about a
- 25 restoration table in the area permit, and I suggest to

- 1 you that this is a mischaracterization. There is no
- 2 restoration table in the area permit, only a
- 3 restoration range table.
- 4 Q. Would you agree that the restoration range
- 5 table that is in the area permit is unusual for area
- 6 permits?
- 7 A. Yes.
- 8 Q. Okay. And the restoration range table that
- 9 is in the area permit, that's a special provision,
- 10 Provision P, of the area permit, correct?
- 11 A. That's correct.
- 12 Q. Okay. Do you think it's possible that that
- 13 special provision was added based on the concerns
- raised at the hearing on the area permit in the 1980s?
- MR. HILL: Objection, speculation.
- 16 Calls for speculation.
- 17 THE COURT: Would you like to respond?
- MS. OBERLIN: I think I'll just reask
- 19 the question.
- THE COURT: Okay. Good.
- 21 Q. (By Ms. Oberlin) Does the notice for the --
- 22 for this proceeding and any of the notices involved in
- 23 this proceeding mention amendment to the restoration
- 24 range table in UR02827?
- 25 A. No.

- 1 Q. And when you worked on this permit
- 2 application, did you compare the values in the -- I'm
- 3 sorry. I'm going to withdraw that question and start
- 4 again.
- 5 When you worked on the production area
- 6 authorization range table, did you ever compare that
- 7 to the restoration range table in the area permit?
- 8 A. The restoration table in the -- the draft PAA
- 9 against the range table in the permit, I didn't
- 10 compare those, no.
- 11 Q. And how did you calculate the values that are
- in the PAA range table?
- 13 A. I -- I calculated them by following the rules
- in -- in the 331, which is look at the summary table
- in the application and compare the average values in
- 16 the mining area and the production area and use the
- 17 higher average value for the restoration table.
- 18 Q. Okay. And I'm sorry. Can you tell me what
- 19 was the document you looked at? Did you say that you
- 20 look at the groundwater analysis --
- 21 A. Groundwater analysis report summary.
- 22 Q. And that's behind tab 8 in the area
- 23 authorization materials?
- 24 A. I didn't look at the -- I was looking at
- 25 the -- there's a copy of it in the draft permit, draft

- 1 PAA.
- Q. Okay.
- 3 A. That's what I'm looking at.
- 4 Q. Okay. So you're looking at TCEQ Exhibit 38?
- 5 A. Yes.
- Q. Okay. And can you tell us what page you're
- 7 looking at?
- 8 A. Page 12.
- 9 Q. Okay. And, Mr. Santos, this baseline water
- 10 quality table that's on page 12, this is based on
- 11 values that are obtained from baseline wells in the
- 12 production area authorization; is that correct?
- 13 A. Some of it is from baseline wells, and some
- of it is from monitor wells or monitor ring wells.
- 15 Q. Is any of it based on values obtained at
- 16 production or injection wells?
- 17 A. No.
- 18 Q. And did this table, Attachment G, baseline
- 19 water quality table, change from the draft production
- 20 area authorization issued in 1997 and the one that you
- 21 worked on in 2000?
- 22 A. It didn't change as far as the production
- 23 zone values, no.
- Q. Did it change in some other way?
- 25 A. There were some -- let me -- let me say that

- 1 again. No. I'm sorry. I was wrong. I was wrong
- 2 about that. Yeah, there were some additional baseline
- 3 wells added that -- that changed the values in the --
- 4 under the column of production area.
- 5 Q. Okay. And is it true that in 1997 ten
- 6 baseline wells were used to provide data that aided in
- 7 the creation of this table?
- 8 A. Yes.
- 9 Q. Okay. And is it true that sometime from the
- 10 first draft in 1997 and the second draft in 2000 that
- 11 URI reported the results of 35 additional baseline
- 12 wells?
- 13 A. Yes.
- 14 Q. And those -- that additional data changed
- 15 some of the information that was in this table?
- 16 A. Yes, that's right.
- 17 Q. Okay. And is -- isn't it true that this is
- 18 the data that is used in calculating the values that
- 19 are in the restoration table?
- 20 A. Yes.
- Q. Okay. And so, then, isn't it also true that
- 22 the values in the restoration table changed from the
- 23 draft in 1997 and the draft in the year 2000?
- A. Some of them did, yes.
- Q. Okay. And isn't it -- actually, do you have

- 1 your copy of the 1997 restoration table?
- 2 A. I probably have it in my files, yes.
- 3 Q. Okay. Would you mind referring to it for
- 4 just a couple of questions that I have for you?
- 5 A. I can do that, yes.
- 6 THE COURT: Let's go off the record.
- 7 (Off the record)
- 8 Q. (By Ms. Oberlin) Okay. Mr. Santos, I'm
- 9 going to ask you some questions that are going to
- 10 refer to the restoration table and the current --
- MS. MANN: He's not back yet.
- 12 THE COURT: You know, he's right --
- 13 you're right. He's not.
- MS. MANN: Let's wait.
- 15 (Off the record)
- 16 Q. Is it true, Mr. Santos, that in the
- 17 restoration table included with draft PAA3 1997, the
- 18 mercury value was .00001 milligrams per liter and that
- in the 2000 draft it's .0001 milligrams per liter?
- 20 A. Yes, that's right.
- Q. Okay. Isn't it true that uranium in the 1997
- 22 draft was .102 milligrams per liter and that in the
- 23 2000 draft it's .338 milligrams per liter?
- 24 A. That's right.
- 25 Q. And do you know if .338 milligrams per liter

- 1 is the same as 338 micrograms per liter?
- 2 A. That sounds right.
- 3 Q. Okay. And do you know if the current
- 4 drinking water standard for uranium is 30 micrograms
- 5 per liter?
- A. I'm not sure I remember the current drinking
- 7 water standard of uranium.
- 8 Q. Okay. And is it true that radium 226 in the
- 9 1997 draft restoration table was 5.2 picocuries per
- 10 liter and that in the 2000 draft it's -- 2000 draft
- 11 it's 21.6 pico liters -- or picocuries per liter?
- 12 A. That's correct.
- 13 Q. And these changes were made because URI
- 14 drilled 35 additional baseline wells?
- 15 A. Let's see. I don't think the mercury was
- 16 changed because of that.
- 17 Q. Okay. What do you think the mercury was
- 18 changed --
- 19 A. Let me -- let me look at something on
- 20 mercury.
- 21 Q. Okay.
- 22 A. On -- on mercury I think there may be an
- 23 error in the groundwater analysis report in this -- in
- 24 the draft PAA.
- 25 Q. In the -- in the current draft that we're

- 1 working with?
- 2 A. Yes.
- 3 Q. Okay. And you think the correct value ought
- 4 to be what?
- 5 A. Well, in the 1989 PAA, the mercury value has
- 6 four zeros decimal point.
- 7 Q. Okay.
- A. And in the draft PAA, there -- there's three
- 9 decimals. And I -- I think probably the four -- four
- 10 zeros -- I mean, four zeros is correct.
- 11 Q. Okay. Then, is the mercury value something
- 12 you intend to revise before this PAA authorization
- 13 goes before the commissioners?
- 14 A. Yes. I think that should be changed back
- 15 to -- to four zeros following the decimal point.
- 16 Q. Okay. Very good. Mr. Santos, did the
- 17 control parameter upper limits in this production area
- 18 authorization also change after the 35 additional
- 19 baseline wells were drilled?
- 20 A. When I compare the two control parameter
- 21 upper limits table, the values for the 400-foot sand
- 22 and the AA sand were missing from the original PAA,
- 23 the 1989 -- 1998 PAA.
- Q. Okay. And those have been placed in the
- 25 current PAA?

- 1 A. That's correct.
- 2 Q. So you have no basis for comparison on those
- 3 values?
- 4 A. That's correct.
- 5 Q. Okay. And do you recall what the applicant
- 6 was using as a upper control limit for those
- 7 parameters that weren't listed during its production
- 8 in 1988 at production area 3?
- 9 A. I don't recall.
- 10 Q. Okay. And did the values for other control
- 11 parameters change from the 1997 draft to the 2000
- 12 draft?
- 13 A. There's a change in conductivity and a change
- in uranium in the production zone.
- O. And what's the -- what's the value of uranium
- in migs per -- milligrams per liter in 1997?
- 17 A. 5.229.
- 18 O. And it's 6.54 in the 2000 draft?
- 19 A. That's correct.
- Q. Okay. What other values have changed?
- 21 A. Conductivity.
- 22 Q. In the production zone?
- 23 A. In the production zone, yes.
- O. And what's the 1997 value?
- 25 A. 3238.

- 1 Q. And the 2000 value is 3525?
- 2 A. That's correct.
- 3 Q. Did any of the nonproduction zone values
- 4 change?
- 5 A. No.
- 6 Q. Okay. Is the purpose of the control
- 7 parameter upper limits the level of detection at
- 8 monitor wells that notes an excursion?
- 9 A. That's correct.
- 10 Q. Okay. So, for example, if a control
- 11 parameter upper limit is 554 and monitor well value is
- 12 above that, then that is significant of an excursion
- 13 at that monitor well?
- 14 A. Yes.
- 15 Q. Okay. For the 1997 area authorization, URI
- 16 was using ten baseline well values; is that correct?
- 17 A. Yes.
- 18 Q. And was ten baseline wells enough to meet the
- 19 TCEQ's regulations?
- 20 A. Yes, it was.
- 21 Q. So when they had ten baseline wells, they
- were in compliance with the regulations?
- 23 A. Yes.
- Q. Did T -- did URI voluntarily drill 35 new
- 25 baseline wells?

- 1 A. Yes.
- O. Did the TCEO ask URI to drill those 35 new
- 3 wells?
- 4 A. No.
- 5 Q. Were the 35 new baseline wells required to
- 6 bring URI into compliance with some regulation of the
- 7 TCEQ?
- 8 A. No.
- 9 Q. Is it true that the -- the changes that we
- 10 just talked about made the levels in the 2000 draft
- 11 less protective of the environment than in the 1997
- 12 draft? And for this I might refer you to your direct
- 13 testimony on page 16 at lines 27 through 30.
- 14 A. Okay.
- THE COURT: Could you restate that page
- 16 again?
- MS. OBERLIN: Sure. This is page 16 of
- 18 Mr. Santos' direct testimony at lines 27 through 30.
- 19 THE COURT: Thank you.
- 20 A. Yes, that would be less -- less protected.
- 21 Q. (By Ms. Oberlin) Of the environment?
- 22 A. Of the environment, yes.
- Q. Okay. Thank you. Mr. Santos, do you work on
- 24 enforcement issues at the TCEO?
- 25 A. No, I don't.

- 1 Q. Okay. Do you work on compliance issues at
- 2 the TCEQ?
- 3 A. No, I don't.
- 4 Q. Are reports of violations necessarily
- 5 submitted to you?
- 6 A. No.
- 7 Q. Does your review of an applicant to the TCEQ
- 8 end after the application has been processed?
- 9 A. Would you do -- ask that again, please.
- 10 Q. Is your job to review applications at the
- 11 TCEQ?
- 12 A. Yes.
- 13 Q. Okay. Is it your job to continually follow
- 14 along the affairs of an applicant once the application
- 15 has been issued?
- 16 A. No.
- 17 Q. Okay. Are you necessarily made aware of
- inspections at URI's facility?
- 19 A. No.
- Q. Are you necessarily made aware of any
- 21 enforcement actions at URI's facilities?
- 22 A. No.
- Q. When you're reviewing an application and you
- 24 believe that the application is not administratively
- 25 complete, do you send a notice of deficiency to the

- 1 applicant?
- 2 A. Yes, I would.
- 3 Q. Okay. And then you review materials,
- 4 hopefully, that they send to you to remedy the
- 5 problem?
- 6 A. Yes.
- 7 Q. Okay. Is it true that when you reviewed the
- 8 production area authorization 3, you also received
- 9 seven responses to notices of deficiencies that you
- 10 sent to URI concerning production area authorization
- 11 application?
- 12 A. I -- I received replies to -- you know, these
- 13 I don't remember the number.
- 14 Q. Okay. I might refer you to Attachment 1-G to
- 15 your prefiled direct testimony. And I think you might
- 16 list them there when you talk about them while you
- 17 look at it.
- MR. REDMOND: Did you use an exhibit
- 19 number?
- 20 THE COURT: Rebuttal direct testimony is
- 21 Exhibit 36.
- MS. OBERLIN: Thank you. Exhibit 36.
- A. What was the reference again?
- O. (By Ms. Oberlin) It's Attachment 1-G. I
- 25 think it begins after the attachments to your

- 1 statement of qualifications.
- 2 A. The list of documents reviewed?
- 3 Q. Yes, that's correct.
- 4 A. Okay.
- 5 O. And I think that No. 1 relates to the waste
- 6 disposal wells because there you use the word permit
- 7 as compared to the items listed in No. 2 where you
- 8 refer to the PAA application. You think it's true
- 9 that No. 1 refers to the waste disposal well permit
- 10 applications?
- 11 A. Yes.
- 12 Q. Okay. And so you reviewed the application
- 13 itself dated January 13th, 1998, and notice of
- 14 deficiency replies received on February 5th, 1999;
- 15 November 1st, 1999; February 24th, 2000; March 8th,
- 16 2000; March 27th, 2000; September 12th, 2000; and
- 17 June 5th, 2002?
- 18 A. Okay.
- 19 Q. Is that correct?
- 20 A. Yes.
- Q. Okay. And then for the PAA application dated
- June 16th, 1997, you reviewed that, a revision dated
- July 11th, 1997, and notice of deficiency replies
- 24 dated December 2000; July 7th, 2001; July 30th, 2001;
- 25 December 11th, 2001; March 25th, 2002; April 9th,

- 1 2002; and April 10th, 2002?
- 2 A. That's correct.
- 3 Q. Okay. Do -- is there any limit on the number
- 4 of notices of deficiencies you can send to an
- 5 applicant?
- 6 A. There is now. I don't believe there was at
- 7 that time.
- 8 O. And what's that limit now?
- 9 A. The limit now is two.
- 10 Q. And what happens to an applicant who receives
- 11 more than two notices of deficiencies?
- 12 A. The application could be returned. Now,
- 13 these -- all these replies were not from -- from
- 14 individual NODs. Some -- sometimes I got more than
- 15 one reply from one NOD.
- 16 Q. I understand. Do you recall how many NODs
- 17 you had to send in this matter for each -- separately
- 18 answering for the renewed permits for waste disposal
- 19 wells and production area? If you remember.
- 20 A. I might have to go back and review my NOD
- 21 letter. Just this was an all new situation, but I
- 22 believe there were two technical NODs and several NODs
- 23 to establish a proper mailing list because of some
- 24 changes in -- in rules and other changes.
- 25 Q. Okay. Number 3 on this list of documents

- 1 that we're looking at is entitled TNRCC UIC Permitting
- 2 Team Permit Writer's Manual Updated 1999. Is that a
- 3 quidance document?
- 4 A. Yes, it is.
- 5 Q. Okay. So you rely on guidance documents in
- 6 your review of applications?
- 7 A. Yes.
- 8 Q. Do you make applicants aware of the guidance
- 9 documents so that they might have applications that
- 10 comply with the guidance documents?
- 11 A. Yes, we do.
- 12 Q. Okay. Are you in charge of monitoring the
- 13 restoration progress at the Kingsville dome site?
- 14 A. No.
- 15 Q. Who's in charge of that?
- 16 A. It would be somebody in the regional office
- 17 in Corpus Christi.
- 18 Q. Okay. Do you recall that the draft permit
- 19 area authorization, TCEQ Exhibit 38, has a special
- 20 provision concerning restoration? And I believe
- 21 that's special provision 6 -- I mean -- excuse me --
- 4-B on page 2.
- A. Yes, it does.
- Q. Okay. Will it be your job to ensure that
- 25 this special provision is complied with if this

- 1 authorization is issued?
- 2 A. No, it won't.
- 3 Q. Okay. Would that be the job of the Corpus
- 4 Christi office?
- 5 A. Yes.
- 6 Q. Okay. So you will not have any way yourself
- 7 of following whether or not this special provision is
- 8 complied with?
- 9 A. Well, you know, I have a way of -- of
- 10 following it if I ask the Corpus Christi office, but
- 11 it -- it wouldn't be part of my job, if that's what
- 12 you mean.
- Q. Okay. Yes, that is what I meant, not part of
- 14 your job. Thank you. It's not part of your job,
- 15 then?
- 16 A. That's correct.
- 17 Q. Okay. I also notice that the current draft
- 18 PAA authorization has a special provision E on page
- 19 3. This special provision requires a copy of a letter
- 20 from the Department of State Health Services which
- 21 states that sufficient financial security for
- 22 groundwater restoration has been posted with the
- 23 Department of State Health Services.
- 24 A. Yes.
- 25 Q. Is this special provision something that is

- 1 usually put in production area authorizations?
- 2 A. No, it's not.
- 3 Q. Do you recall why this special provision was
- 4 put in this production area authorization?
- 5 A. I -- I believe it was put in, in response to
- 6 some of the comments we received on -- from the notice
- 7 of this application.
- 8 Q. Okay. And do you know yet whether a copy of
- 9 a letter from the Department of State Health Services
- 10 has been provided to the TCEQ?
- 11 A. I haven't seen a copy.
- 12 Q. Okay. Will you -- will you see a copy before
- 13 you're able to give your recommendation to the
- 14 commission as a staffer about whether or not this
- 15 authorization should be approved?
- 16 A. I don't know if I would, no.
- 17 Q. Okay. So you will make a recommendation to
- 18 the commission independent of ever seeing a letter
- 19 referenced in E on page 3?
- A. A recommendation on the draft PAA, you mean?
- 21 O. Yes.
- 22 A. Yes, I think we would. Yes.
- Q. Okay. And so you won't have -- it will not
- 24 concern you, the form of financial assurance that is
- 25 posted with the Department of State Health Services,

- 1 will it?
- 2 A. I think the only concern of this provision
- 3 would be that some sort of financial assurance is
- 4 posted. How it's posted I don't think would be a
- 5 concern, no.
- 6 Q. Okay. Do you -- well, do you read this
- 7 special provision to require a certain type of
- 8 financial assurance being posted with the Department
- 9 of State Health Services; for example, a bond versus a
- 10 letter of credit?
- 11 A. No. I don't think that would -- would be
- 12 considered, no.
- Okay. You're familiar, are you not, with the
- 14 groundwater restoration performance agreement that
- 15 URI, the TCEQ, the Texas Department of Health, and
- 16 USSF&G are a party to?
- 17 A. I'm somewhat familiar with it.
- 18 Q. Would this special provision necessarily
- 19 prohibit URI from using that agreement as posting of
- 20 financial assurance with the Department of State
- 21 Health Services?
- 22 A. I would say that the Department of State
- 23 Health Services would be the ones to determine what
- 24 kind of financial assurance is posted. And if they're
- 25 satisfied with -- with the financial assurance, they

- 1 would send us a letter that's required by this
- 2 provision.
- 3 Q. Okay. So this provision doesn't require a
- 4 specific type of financial assurance?
- 5 A. No.
- 6 Q. Okay. You mentioned that you've worked on
- 7 approximately 23 production area authorizations since
- 8 you've been at TCEQ; is that correct?
- 9 A. That's correct.
- 10 Q. Okay. Have any of those applicants ever come
- in for an amendment to their restoration table?
- 12 A. The -- let's see. All but -- but one that I
- 13 can remember has, yes.
- 14 Q. So of the 23 you've worked on, all but one
- 15 have --
- 16 A. Yeah. Now, some -- some of them, I think,
- were probably new production area authorizations, not
- 18 amendments. But the majority of them were amendments,
- 19 and -- and I can only think of one that did not
- 20 request an amendment.
- 21 O. So the values that are in the restoration
- 22 range table are more likely than not subject to
- 23 amendment at a later time by --
- MR. REDMOND: Objection. We have two
- 25 different tables. We have an -- we have a restoration

- 1 range table which was in one document and a
- 2 restoration table in another document. It's very
- 3 confusing, but I think the record needs to reflect
- 4 which document the restoration range table comes from
- 5 and which document --
- 6 THE COURT: Okay.
- 7 MR. REDMOND: -- the restoration table
- 8 comes from.
- 9 MS. OBERLIN: This last series of
- 10 questions that I just asked were all about a
- 11 restoration table in permit area authorizations. And
- if I said restoration range table, I wasn't speaking
- 13 of the restoration range table.
- 14 A. Something else I should add to there, that
- 15 if -- if the one PAA that I was talking about that
- 16 didn't amend the restoration table -- didn't put in
- 17 any kind of amendment. So that -- that's not one that
- 18 I handled. It's just something I worked on.
- 19 Q. (By Ms. Oberlin) Sorry. I didn't
- 20 understand.
- 21 A. So there -- there was no application from the
- 22 PAA that did not -- that was closed out where the --
- 23 all the values fit in -- fit the restoration table.
- In other words, when they got remediated to the values
- 25 on the restoration table, they just notified us

- 1 that -- that the aquifer was remediated, so there
- 2 was -- wasn't any formal action as far as changing the
- 3 PAA.
- 4 Q. Okay. I'm going to ask a couple more
- 5 questions and help clear this up. When you use the
- 6 word remediate in terms of the aquifer, that's the
- 7 same thing as restore the aquifer?
- 8 A. That's correct.
- 9 O. Correct?
- 10 A. Yes.
- 11 Q. Okay. And there is a process that applicants
- 12 use to demonstrate that restoration has been complete;
- 13 is that correct?
- 14 A. Yes, that's correct.
- 15 Q. Is that an administrative process with the
- 16 TCEQ?
- 17 A. Yes, that's right.
- 18 Q. And if an applicant goes through that
- 19 process, TCEQ certifies at the end of that process
- 20 that the restoration has been completed; is that
- 21 correct?
- 22 A. That's -- that's correct, yes.
- 23 Q. If an applicant is unable to meet the values
- 24 in the restoration table in its production area
- 25 authorization, it seeks an amendment of the

- 1 restoration table; is that correct?
- 2 A. That's correct.
- 3 Q. And then it goes through a process to certify
- 4 that restoration has been complete in accordance with
- 5 the amended restoration table; is that correct?
- 6 A. That's correct, yes.
- 7 Q. And is it your testimony that in the 23
- 8 production area authorizations you've worked on, all
- 9 but one have required an amendment to the restoration
- 10 table before they could have certification from the
- 11 TCEQ that remediation was completed?
- 12 A. That's -- that's not quite correct. I worked
- on, say, 23 applications involving production area
- 14 authorizations and, oh, maybe three or four of them
- 15 were new production area authorizations, and the rest
- 16 of them were amendments to the restoration table.
- 17 Q. Okay. So you've -- of the production area
- 18 authorizations you've worked on, something less than
- 19 23 has attempted to restore the aquifer?
- 20 A. Yes.
- Q. Okay. And of that number, only one has been
- 22 able to restore without an amendment to the
- 23 restoration table?
- A. Well, if we assume that there's -- if we're
- 25 talking about 20 applications to amend the restoration

- 1 table, there would be one more that did not put in
- 2 that kind of application, so there would be 21.
- 3 Q. So 20 applicants have been able -- one of 21
- 4 applicants has been able to restore to the values in
- 5 the production area authorization that was issued?
- A. Yes, that would be correct.
- 7 Q. Okay. Thank you. All right. Is URI unique
- 8 in the fact that there was a halt in production in
- 9 production area 3 rather than a completion of
- 10 production before restoration began?
- 11 A. That's the only one I know about, yes.
- 12 Q. Okay. And did URI submit any kind of expert
- information to the agency suggesting effects of a halt
- in production?
- 15 A. I don't know of any, no.
- 16 Q. Did the agency undertake any sort of study or
- 17 compilation of studies concerning the effects on the
- 18 environment of a halt in production at a production
- 19 area?
- 20 A. I -- I don't know of any.
- 21 Q. Okay. Is it true that leaching solutions
- 22 that are introduced into a production area are only
- 23 removed from the production area during restoration?
- A. That seems reasonable, yes.
- 25 Q. Okay. I would like you to take a look at

- 1 TCEQ Exhibit 36, your prefiled direct testimony, at
- 2 page 13, line 29.
- 3 A. Okay.
- 4 Q. I was wondering if rather than by pumping up
- 5 water wells for the City of Corpus Christi, you meant
- 6 the City of Kingsville in that line, on page 13 at
- 7 line 29.
- A. Yes, that's -- that's true. That's correct.
- 9 Q. Okay. I thought so. I just wanted to check
- 10 on that. Thank you. Okay. If you can find it in the
- 11 exhibits to your prefiled direct testimony, I'd ask
- 12 you to turn to page 8 of your supplementary response
- 13 to comments.
- 14 THE COURT: This is in 36?
- MS. OBERLIN: Yes, sir.
- MR. REDMOND: Should have its own
- 17 exhibit number.
- MS. OBERLIN: Actually, I meant to ask
- 19 you to turn to page 8 of the original response to
- 20 public comment on the draft production area
- 21 authorization, and this is dated December 5th, 1997.
- 22 THE COURT: Do you have a -- an exhibit
- 23 number?
- MS. OBERLIN: Well --
- MR. REDMOND: Should be in Exhibit 30.

- 1 And then there are two portions of Exhibit 30. The
- 2 tab -- or tab numbers don't correspond to exhibit
- 3 numbers.
- 4 MS. OBERLIN: Okay.
- 5 MR. HILL: But tab 12 gets the job,
- 6 doesn't it?
- 7 MS. OBERLIN: Actually, I did not get
- 8 prefiled testimony with tabs in it. So if someone
- 9 could help us locate this witness, I would very much
- 10 appreciate it.
- MR. REDMOND: It's Exhibit 30.
- MS. OBERLIN: And that would be the
- 13 response to comments -- what's the date on that,
- 14 Mr. Redmond?
- 15 MR. REDMOND: There's one that's dated
- 16 May 27, 2005, which is a supplemental response to
- 17 comment. The original response to comment is dated
- 18 December 5th, 1997.
- MS. OBERLIN: Okay. Actually, I'm going
- 20 to withdraw my question on that document. I
- 21 apologize. And I'll pass the witness at this time.
- 22 THE COURT: I think the focus now shifts
- 23 to Ms. Mann.
- MS. MANN: Uh-huh.

25

CROSS-EXAMINATION

- 2 BY MS. MANN:
- 3 Q. You spoke a little bit earlier about
- 4 information gathered through monitoring of baseline
- 5 wells?

1

- 6 A. Yes.
- 7 Q. What is the purpose of -- of baseline wells?
- 8 A. Baseline wells are -- are used to determine
- 9 the premining condition of the aquifer --
- 10 Q. Okay.
- 11 A. -- so that -- you know, there's a number of
- 12 parameters or samples and -- that we know what was
- 13 there before they started mining.
- 14 Q. Is there a recommended spacing of the
- 15 baseline wells provided to permittees?
- 16 A. Let's see. The -- the requirement for
- 17 baseline -- line wells are in the rules. And --
- 18 O. Okav.
- 19 A. -- as I can remember, there's a requirement
- 20 for a certain number of wells, but I don't recall a
- 21 spacing on them.
- Q. Okay. How did you conclude the compliance
- 23 history was acceptable for UR -- for the executive
- 24 director to support URI's PAA?
- 25 A. I didn't see anything in the compliance

- 1 history that would warrant denying the application.
- 2 Q. How much experience do you have with
- 3 analyzing compliance history summaries?
- A. Now, that's -- that's not my area of
- 5 expertise.
- 6 Q. Okay. Do you know if anyone at TCEQ
- 7 independently verifies the information provided by the
- 8 applicant to TCEQ during -- in the permit application
- 9 process?
- 10 A. Well, which -- which information are you
- 11 talking about?
- 12 Q. Okay. For example, some of the technical
- data, or is all of that supplied by the applicant?
- 14 A. We -- we do some independent calculations.
- 15 Q. Does TCEQ perform any independent monitoring?
- A. For the original application, no, we don't.
- 17 O. Okay. Or for a PAA?
- 18 A. Not for the -- you're talking about sampling
- 19 of the wells, I'm sure.
- 20 O. Yes.
- 21 A. Is that correct? For the wells that are
- 22 sampled for the PAA application, no, we don't.
- 23 Q. Okay. Earlier several of us mentioned --
- 24 several of the attorneys mentioned quidance available
- 25 to you to help you do your job as well as guidance

- 1 that you may or may not give to an applicant to help
- 2 them better prepare an application. Can you describe
- 3 some of that quidance?
- 4 A. For the monitor -- I mean -- excuse me --
- 5 the -- for the disposal wells we have a -- a checklist
- 6 that we go through to see -- that corresponds to each
- 7 of the parts of the application. For the PAA
- 8 application, I -- I relied on looking at the rules to
- 9 see what was required for the application.
- 10 Q. Do you know if TCEQ investigators, perhaps
- 11 out of the Corpus Christi regional office, have
- 12 guidance as well on how to perform their
- 13 responsibilities as far as checking up on --
- 14 A. I -- I really don't know what they have.
- 15 Q. Okay. So, then, you don't know whether or
- 16 not they are able to -- to supply guidance to
- 17 permittees?
- 18 A. I've never been an inspector --
- 19 Q. Okay.
- 20 A. -- so I -- I don't know what their procedures
- 21 are.
- 22 Q. In addition to actual notice of deficiency
- 23 letters that you sent to the applicant, did you -- can
- 24 you describe perhaps your level of communication with
- 25 the applicant? Was it -- did you -- did you make

- 1 phone calls in lieu of letters on occasion or send
- 2 E-mails perhaps?
- A. I know I didn't send E-mails at that time.
- 4 I -- I would expect that I had phone calls with them.
- 5 It's been so long. I -- I don't remember definitely.
- 6 I mean, normally I would if I had some minor
- 7 questions, call the applicant.
- 8 Q. Okay. So in addition to any phone calls for
- 9 minor matters, you sent the notice of deficiency
- 10 letters found on --
- 11 A. Yes.
- 12 Q. -- in your --
- 13 A. And if I had any -- any questions, anything
- 14 that had to be corrected, even if I did talk to them
- on the phone about it, I'd send a --
- 16 Q. Okay.
- 17 A. -- NOD to document everything.
- 18 Q. Okay. On page 3 of the production area
- 19 authorization draft permit, which is TCEQ
- 20 Exhibit 38 --
- 21 A. Okay.
- 22 Q. -- special provision E, that refers to the
- 23 financial security that must be provided to the
- 24 Department of State Health Services. Is this the --
- 25 is this the only form of financial security that has

- 1 to be provided by the applicant in conjunction with
- 2 either the waste disposal wells or the PAA?
- 3 A. No. The TCEQ requires financial assurance
- 4 for plugging all of the wells.
- 5 O. And that would be --
- 6 A. So with the PAA it'll be all of the Class III
- 7 wells in that PAA.
- 8 Q. Okay. And can you explain the difference
- 9 between that financial assurance and the financial
- 10 assurance required by special -- or by provision E?
- 11 A. The financial assurance is held by the
- 12 Department of Safe Health Services is for cleanup of
- 13 the groundwater.
- 14 Q. Okay. And what form of financial assurance
- 15 does TCEQ require for -- to satisfy their -- their
- 16 needs?
- 17 A. In form you mean bonds or letters of credit?
- 18 Q. Correct.
- 19 A. There -- there's a -- that's handled by a
- 20 separate section. We have a financial assurance
- 21 section --
- 22 Q. Okay.
- 23 A. -- and they have their own rules. And
- 24 there's a number of -- of different methods listed in
- 25 those rules, and I definitely don't understand any of

- 1 it.
- Q. Okay. So you yourself just make sure that
- 3 they have --
- 4 A. If you want to know what I do, I -- I give
- 5 them the amount that is estimated to be necessary to
- 6 plug the wells, and then they go from there.
- 7 Q. So the -- the amount of financial assurance
- 8 TCEQ requires is solely for plugging the wells and
- 9 securing those wells and is -- and is not related to
- 10 groundwater restoration?
- 11 A. That's --
- 12 O. Is that correct?
- 13 A. That's correct, yes.
- MS. MANN: Okay. I pass the witness.
- 15 EXAMINATION
- 16 BY THE COURT:
- 17 Q. Mr. Santos, I have a few questions for you.
- 18 You noted that it was unusual for there to be a
- 19 restoration range table as opposed to a restoration
- 20 table?
- 21 A. Yes.
- 22 O. What were the circumstances that necessitated
- 23 or led to the use of a restoration range table in this
- 24 matter?
- 25 A. There was a contested case hearing related to

- 1 that permit amendment, and possibly it came from that.
- 2 I wasn't involved or even working with the agency at
- 3 that time, so I don't know.
- 4 Q. You stated in your testimony that an average
- 5 period of time for the processing of one of these
- 6 applications from beginning to end is about a year and
- 7 a half?
- 8 A. I would say the average is -- is somewhere
- 9 between a year and a year and a half from receiving
- 10 the application to issuing the PAA.
- 11 Q. There has been testimony and discussion about
- 12 the fact that there has been litigation associated
- 13 with this application?
- 14 A. Yes.
- 15 Q. And that litigation, I'm sure, accounts for
- 16 some period of -- it's my guess that the litigation
- 17 associated with this application accounted for some of
- 18 that seven years. Do you know what period of time was
- 19 not accounted for during that -- that seven period --
- 20 seven-year period? Here's what I'm trying to get,
- 21 Mr. Santos: Why did it take such a long time, leaving
- 22 aside the litigation?
- 23 A. There -- there were a number of things that
- 24 developed, and I can't remember all of them. I know
- 25 it involved some rule changes that happened while we

- 1 were reviewing the application. I think there was
- 2 some changes in the -- attorneys assigned to it, so
- 3 the new attorneys had to get up to date on it.
- 4 There was some problems in developing a
- 5 list to mail out notice because they -- accounting had
- 6 changed the way they did addresses. So there's just a
- 7 number of things that happened to affect this
- 8 particular application.
- 9 Q. The list that you've described sounds more
- 10 bureaucratic than substantive. Would that be a -- an
- 11 accurate characterization?
- 12 A. I -- I think that would account for most of
- 13 it, yes, sir.
- 14 Q. Okay. And -- all right. Would you turn to
- page 23 of Exhibit 36; that is, your direct testimony.
- 16 And if you'll let me know when you're there.
- 17 A. Okay.
- 18 Q. Would you look at the question that's on
- 19 line 22 in your response that follows it and would you
- 20 tell me if something is missing or if this is a
- 21 complete response?
- MR. HILL: Excuse me, your Honor.
- 23 You're on page 23?
- THE COURT: Yes, sir.
- MR. HILL: And the question beginning on

- 1 line 22?
- THE COURT: 29.
- 3 MR. HILL: I'm sorry.
- 4 MS. OBERLIN: Okay.
- 5 Q. (By The Court) And then your response begins
- 6 on line 31.
- 7 A. Okay.
- 8 Q. Do you --
- 9 A. Yeah. I understand -- understand what you
- 10 mean. I wanted to look at it a minute.
- 11 Q. Okay.
- 12 A. The first two lines to the answer should --
- 13 should have been left out.
- 14 Q. Okay. So -- so the answer begins with the
- 15 words the financial assurance rules and then continues
- 16 from there?
- 17 A. Yes, that's correct.
- 18 Q. Okay. I'm going to jump around a bit, and I
- 19 apologize. With respect to these baseline wells,
- 20 you've testified that the purpose of baseline wells is
- 21 to provide you with information that exists prior
- 22 to -- mining operations begin, correct?
- 23 A. That's correct.
- 24 Q. In your experience with baseline wells, have
- 25 you encountered other situations that involve the

- 1 kinds of changes that are reflected on page 16 of your
- 2 testimony between lines 27 and 30? You previously
- 3 discussed those lines.
- 4 A. That's actually -- in all of the other
- 5 production area authorizations, there would be an
- 6 opportunity for that to happen, because none of the
- 7 production wells would be drilled before the PAA was
- 8 authorized. So the table would only be set up from
- 9 the baseline wells, monitor wells.
- 10 Q. So would it be fair to characterize these as
- 11 baseline wells if they were drilled after production
- 12 began?
- 13 A. The wells that I used to make the changes
- 14 were drilled before production started. There were
- 15 two groups of wells that were submitted, and some of
- 16 them were after production started, and some of them
- 17 were before. I only used the ones that were done
- 18 before.
- 19 Q. Okay. So -- so with respect to the changes
- 20 that occurred in those original baseline wells, can
- 21 you provide an expert opinion on why these kinds of
- 22 changes were found?
- 23 A. Well, my opinion would be that the more
- 24 samples we have, the better characterization of the
- 25 aquifer we'd get. In other words, it would be a

- better average -- depending if you used more points,
- 2 you'd get a better average.
- 3 Q. Sure.
- 4 A. So that's -- that's why I adjusted it.
- 5 O. So we're talking about sort of scattergram
- 6 analysis where you're looking at a lot of different
- 7 points on a -- on a graph and you're -- and you're
- 8 getting a better average as a result of having more
- 9 information?
- 10 A. That -- that sounds like the same thing, yes,
- 11 sir.
- 12 Q. Okay. Now, then, with respect to -- to
- 13 uranium and radium, would you agree with me that those
- 14 are two of the minerals or -- or elements that are of
- 15 greatest concern to the community at large?
- 16 A. Yes, I would.
- 17 Q. And -- and are these changes from .102 to a
- 18 .338 for uranium and from 5.2 to 21.6 for radium --
- 19 are those significant changes?
- 20 A. I wouldn't consider the change for uranium to
- 21 be really significant. The change in radium is a big
- 22 jump. But if it's a better characterization of what
- 23 radium is in the aquifer, then that would be the --
- 24 the one to use.
- 25 Q. Sure. Sure. And -- and the goal here, I'm

- 1 assuming, is to get the information that is the most
- 2 accurate?
- 3 A. That's correct, yes.
- 4 Q. Okay. On page 19 in line 19, there's the
- 5 question, describe the cone of influence. Were you
- 6 present for the description of the cone of influence
- 7 by Mr. Demuth?
- 8 A. Yes.
- 9 Q. And does your response match his -- I don't
- 10 mean word for word. I mean, is the kind of concept
- 11 that you're describing similar to the one that he
- 12 describes?
- 13 A. I think it would the same, yes.
- 14 Q. Okay. The reason for my question is, it
- 15 sounded to me as though his description was a
- 16 three-dimensional area or volume, and -- and yours
- 17 seems to describe a surface area around a disposal
- 18 well.
- 19 A. I was probably thinking of a map of the cone
- 20 of influence when I said surface area.
- Q. Okay. So that's just a -- a -- one cut in
- 22 the pie?
- 23 A. Yes. I think the -- the expression cone, I
- 24 think comes from the value is higher close to well and
- 25 drops off going away from the well, so --

- 1 Q. Right. Okay. The compliance history issue
- 2 has been an important one in this proceeding. And
- 3 your testimony is that -- I'm looking at page 21
- 4 between lines 18 and 24. You say that a permit must
- 5 be denied when the commission concludes that the
- 6 applicant's compliance history is unacceptable.
- 7 And there has been evidence introduced
- 8 previously that the applicant's compliance history is
- 9 acceptable. Are you -- when you make your
- 10 recommendation to the commission, is it the score that
- 11 you look at, or do you look at the individual
- 12 compliance reports?
- 13 A. For the permits for the disposal wells, that
- 14 goes on your older system. That doesn't use the
- 15 scores.
- 16 Q. Ah, okay.
- 17 A. And it -- I guess you would say an overall
- 18 assessment of their compliance.
- 19 Q. Can you tell us a little more about that?
- 20 A. Not really. It's -- that part of the
- 21 compliance history requirement is really too
- 22 complicated for me to understand. I don't -- I don't
- 23 do that part of it. Now, for the PAA, I think the
- 24 compliance history that we have in the draft permit
- 25 package -- draft PAA package does have scores in it.

- 1 I think we use that for the -- for the draft PAA.
- Q. Well, leaving the -- the draft -- well, let
- 3 me back up. Your recommendation is with respect to
- 4 both the draft PAA and the renewal of the permits,
- 5 correct?
- 6 A. Yes.
- 7 Q. And so -- and so looking just at the renewal
- 8 of the -- the two waste disposal well permits, is --
- 9 it sounds to me as though you rely upon the
- 10 recommendations of others with respect --
- 11 A. Well --
- 12 Q. -- to compliance history?
- 13 A. -- someone else does a -- a summary of the
- 14 compliance history, and then I look at that.
- 15 O. I see. And -- and does that -- do we have
- 16 copies of those recommendations in -- in our record
- 17 thus far?
- 18 A. I'm not sure if we do or not.
- 19 Q. Okay. And when you review them, are you
- 20 relying upon someone else's conclusions, or are you --
- 21 or are they just providing you with a summary of the
- 22 gross information, or do you remember?
- 23 A. I'll have to say I -- I don't remember what
- 24 the -- what the compliance history summary looks like
- 25 now.

- 1 Q. Okay. Well -- and here's where I'm going:
- 2 Mom and dad go out of town. Eldest son is put in
- 3 charge of the kids. Mom and dad come back. Mom and
- 4 dad say, How did it go? Eldest son's response can be,
- 5 Bobby dumped the garbage over. Or eldest son can say
- 6 Bobby was good or bad.
- 7 And what I'm trying to find out is
- 8 whether or not the description is Bobby dumped the
- 9 garbage over or Bobby was good or bad. That's --
- 10 that's sort of where I'm looking.
- 11 A. I understand what you mean and --
- 12 Q. Okay.
- 13 A. I can't remember what -- what it said now.
- 14 Q. All right. I just have one or two more, and
- 15 I'll be done. Does your agency rely upon URI's
- 16 measurements or readings in order to obtain
- information for the purpose of granting or denying
- 18 these applications, or does your agency take its own
- 19 readings for that purpose?
- 20 A. We rely on the information in the
- 21 applications. Say you're referring to going out and
- 22 sampling their wells. We don't do that independently
- 23 for the application.
- Q. When samples are taken -- the description
- 25 that we've had in the evidence, a -- an amount of

- 1 water is -- is grabbed -- to use the verb that has
- 2 been used in these proceedings --
- 3 A. Are you talking about the -- the disposal
- 4 well or the -- or the PAA?
- 5 Q. Well, you know, I may be mixing my two -- you
- 6 know, I think I'm -- I think I am mixing my two
- 7 different applications. I think you're right. I
- 8 think the grab test had to do with the -- not the
- 9 disposal wells.
- But in any case, is it ever the case
- 11 that TCEQ is provided with a sample that TCEQ then
- 12 takes back and evaluates on its own, or is that -- is
- 13 the sample that the applicant uses and evaluates
- 14 solely the basis of the information upon which TCEQ
- 15 makes its determination?
- 16 A. For the application for the PAA, it's only
- 17 the applicants.
- 18 Q. Okay. And as far as the waste disposal well?
- 19 A. Well, there's really not any sampling in that
- 20 other than sampling of the waste stream, but it's also
- 21 the -- and, in fact, for a new -- for a new disposal
- 22 well, there wouldn't necessarily be any waste stream.
- Q. Right.
- A. So that -- that's all from the applicant,
- 25 from the application from the applicant.

- 1 THE COURT: Okay. Those are all my
- 2 questions. Thank you very much. I appreciate your
- 3 clear responses. I think it shifts now back to the
- 4 ED.
- 5 MR. REDMOND: I have no redirect
- 6 questions. I think this concludes our direct case.
- 7 THE COURT: I believe so.
- MS. OBERLIN: Your Honor, I would ask
- 9 for the indulgence to recross based on some of the
- 10 questions you asked the applicant -- I mean, this
- 11 witness, if possible.
- 12 THE COURT: I -- if I have opened new
- doors, I think you're entitled to do so, so --
- MS. OBERLIN: Okay.
- 15 THE COURT: Go ahead.
- 16 RECROSS-EXAMINATION
- 17 BY MS. OBERLIN:
- 18 Q. Okay. With regard to the baseline wells that
- 19 you were talking about with the judge, the 35 new
- 20 wells, did those become production wells after they
- 21 were drilled?
- 22 A. They -- they could. And when you -- you keep
- 23 talking about 35 wells. I've got a list of the wells
- I used in the draft permit, and I think there were 16
- 25 of them.

- 1 Q. Okay. And do you recall if those were in the
- 2 production area or dispersed throughout the mine area
- 3 at large?
- 4 A. They -- they should be in the production
- 5 area.
- 6 Q. So the wells that you used the additional
- 7 baseline data from were drilled into the production
- 8 area?
- 9 A. Yeah. Baseline wells should be in the
- 10 production area.
- 11 Q. How big is the production area in this
- 12 application? If I said it was 94 acres, would that
- 13 sound correct to you?
- 14 A. 94 acres is what is in the application, yes.
- 15 Q. Okay. And is the mine area in this
- 16 application larger than that, something like close to
- 17 400 acres?
- 18 A. That -- that would be normal, yes. I think
- 19 that was the number in the --
- 20 Q. Okay.
- 21 A. -- application.
- Q. Okay. And as far as the characterization of
- 23 the new information as scattergram analysis --
- 24 A. I didn't characterize it --
- 25 O. I realize.

- 1 THE COURT: Those were my words.
- MS. OBERLIN: I realize.
- A. And, in fact, I'm not sure what that means.
- 4 Q. Okay. But to some degree URI drilled some
- 5 wells in one area, the production area, and not in the
- 6 larger area of the mine area?
- 7 A. The additional well?
- 8 O. Yes.
- 9 A. Yes, that's correct.
- 10 Q. Okay. And then with regard to the stops and
- 11 starts happening in this particular production area, I
- 12 ask you, with regard to TCEQ Exhibit 38, Attachment E
- is the current mining and restoration schedule; is
- 14 that correct?
- 15 A. Let me look. That's correct.
- 16 Q. Okay. And I'll ask you some -- well, okay.
- 17 So looking down, say, at restoration for PAA3 well
- 18 fields 9 and 10, when does this mine plan show
- 19 restoration of those well fields?
- 20 A. It shows it from mid-2002 to mid-2004.
- 21 Q. Is that an accurate representation of what
- 22 has happened in reality at this production area?
- 23 A. No. This -- this schedule would be out of
- 24 date.
- 25 Q. So do you intend that before the

- 1 commissioners make a vote on this production area
- 2 authorization that this mine plan will be completely
- 3 changed from what's here in this exhibit?
- 4 A. I'm sure it would be, yes.
- 5 Q. Okay. And --
- 6 A. Are you talking about adding and putting a
- 7 new mining and restoration schedule into the draft
- 8 permit?
- 9 O. Yes.
- 10 A. I think we should have one if we were -- if
- 11 the applicant would provide one to us.
- 12 Q. Okay. So currently we're not looking at a
- mine plan estimate that could ever meet what's
- 14 happening on the ground?
- 15 A. Well, I think that's obvious, yes.
- 16 Q. Okay. And was it your testimony earlier that
- 17 mine plan estimates are estimates and they're not
- 18 enforceable?
- 19 A. That's what I would say, yes.
- Q. Okay. And you're not swayed by provision 30,
- 21 Texas Administrative Code 331.107 (c) which says that
- 22 aquifer restoration, where appropriate for each permit
- or mine area, shall be accomplished in accordance with
- 24 a time table specified in the currently approved mine
- 25 plan unless otherwise authorized by the commission?

- 1 A. Yes, I understand that. But there are also
- 2 rules that require an updated mine plan with each new
- 3 PAA.
- 4 Q. So this rule would seem to suggest that the
- 5 mine plan that's associated with the area
- 6 authorization is actually an enforceable document that
- 7 controls the rate at which production and restoration
- 8 must occur at that production area?
- 9 A. I don't -- I don't think I -- I'm not sure I
- 10 would interpret it that way.
- 11 Q. Okay. And you're not a lawyer; is that
- 12 correct?
- 13 A. That's correct.
- 14 Q. Okay. And you're not a commissioner; is that
- 15 correct?
- 16 A. That's right.
- MS. OBERLIN: Okay. Okay. Pass the
- 18 witness.
- 19 THE COURT: Mr. Hill.
- MR. HILL: Thank you, your Honor.
- 21 RECROSS-EXAMINATION
- 22 BY MR. HILL:
- 23 Q. Do you recall when you were just recently
- 24 being cross-examined by Ms. Oberlin, she read you a
- 25 portion of 331.107 (c) which began with words which

- 1 included where appropriate?
- 2 A. Yes.
- 3 Q. Okay. Would it be fair to say that the
- 4 commission and the staff have some latitude in
- 5 deciding where it is appropriate to require compliance
- 6 with a mine plan given that a mine plan may elsewhere
- 7 be defined as an estimate by the miner himself?
- 8 A. Yes.
- 9 Q. Historically has the commission ever
- 10 interpreted that rule as making a mine plan, quote,
- 11 enforceable to your knowledge?
- 12 A. No, it hasn't.
- Q. Would -- that would then be a new departure
- 14 for the commission, would it not?
- 15 A. Yes.
- 16 Q. Do you recall being asked by Ms. Oberlin a
- 17 question which began with the characterization of
- 18 there being 90-something acres in PAA3 and 500 acres
- in the permit area?
- 20 A. Yes.
- 21 Q. Okay.
- MS. OBERLIN: Objection, your Honor. I
- 23 think I said that there were 94 acres in the
- 24 production area.
- MR. HILL: If she so said, I have no

- 1 problem with that. I heard 90, and I wanted to
- 2 clarify that the production area was of a different
- 3 size.
- 4 Q. And do you have that number?
- 5 A. Well, on the current area map, it has mine
- 6 area 373 acres and production area 94 acres.
- 7 Q. All right.
- 8 THE COURT: And my understanding was
- 9 that she had said 94, and so I think the objection is
- 10 moot at this point.
- MS. OBERLIN: I agree.
- 12 THE COURT: Thank you for the
- 13 clarification.
- 14 Q. (By Mr. Hill) Do you recall the mention of
- 15 500 acres in the permit area? Well, I should
- 16 continue. You've already answered that question.
- 17 You --
- THE COURT: Yeah.
- MR. HILL: You did answer that that's
- 20 what he heard.
- Q. Wouldn't it be correct to say that there are
- over 2,100 acres in the permit area covered by permit
- 23 URO -- 02827?
- 24 A. I don't remember the exact number but --
- 25 Q. Wouldn't you agree it's on the order --

- 1 something greater than 2,000 acres?
- 2 A. That sounds correct, yes.
- 3 Q. All right. I'm not trying to harass you. I
- 4 just realize that it's easy to get this nomenclature
- 5 somehow rolled together on the fourth day in the
- 6 afternoon of the hearing. Isn't it a fact that the
- 7 TCEQ, even if it doesn't conduct its own sampling,
- 8 often splits samples with a permittee or the holder of
- 9 an area authorization?
- 10 A. That -- that's -- is done sometimes, yes.
- 11 Q. And split sampling is -- pardon me.
- 12 Splitting of samples when they are liquids gives you
- 13 reasonable assurance of an identical sample to -- for
- 14 each party; isn't that correct?
- 15 A. That's right.
- Q. And split samples then allow for the state to
- 17 send the -- its portion of the split either to secure
- 18 storage or to a laboratory for analysis; is that
- 19 correct?
- 20 A. That's correct.
- 21 Q. And leaves the recipient of the other portion
- of the split the same options; isn't that correct?
- 23 A. That's correct.
- 24 O. And on occasion isn't it true that both
- 25 parties send their samples for analyses and their

- 1 results are compared?
- 2 A. Yes.
- 3 Q. When that is done are the laboratories which
- 4 are used by the agency laboratories which are EPA
- 5 approved as to the protocols and as to the practice of
- 6 the required protocols?
- 7 A. Yes, they should be.
- 8 Q. Are you aware of URI's use of laboratories
- 9 which are certified?
- 10 A. I can't recall now which laboratory they
- 11 used.
- 12 Q. Let me suggest -- ask you some questions
- 13 maybe about Jordan Laboratories in Corpus Christi.
- 14 A. Yes.
- Q. Are you aware of URI using them sometimes?
- 16 A. That -- that name does sound familiar, yes.
- 17 Q. Are you aware of whether Jordan Laboratories
- 18 in Corpus Christi is considered an acceptable and
- 19 reputable laboratory for those purposes?
- 20 A. I believe they are, yes.
- O. Would the same be true of Core Laboratories?
- 22 A. That should be, yes.
- Q. All right. There might be others; isn't that
- 24 true?
- 25 A. Yes.

- 1 Q. All right. Isn't it a fact that in addition
- 2 TCEQ sends out auditors to the premises of permittees
- 3 such as URI who may drop in unannounced to commence a
- 4 detailed audit of the site and of all paperwork held
- 5 at the site?
- 6 A. That's correct.
- 7 Q. And it is true, is it not, that URI has been
- 8 visited perhaps dozens of times in the last five or
- 9 ten years by such surprise audits?
- 10 A. Yes.
- 11 Q. Isn't it true -- I should ask, do you know
- 12 whether or not URI, as other permittees of the agency,
- is bound both by the professional credentials of the
- 14 persons who submit reports to TCEQ and by TCEQ's own
- 15 rules and requirements to speak truthful -- represent
- 16 data truthfully to the agency?
- 17 A. Yes.
- 18 Q. And isn't it a fact that an applicant who
- 19 knowingly misrepresents or misrepresents --
- 20 substantially misrepresents facts in an application in
- 21 order to secure approval or to avoid enforcement may
- then be subject to such penalties as permit revocation
- 23 on the basis of having misrepresented data or made
- 24 material misrepresentations to the agency?
- 25 A. Yes.

- 1 Q. Are you aware of criminal penalties that
- 2 might attach to falsification of records filed with
- 3 the agency for environmental reporting purposes?
- 4 A. I'm not aware of any, no.
- 5 Q. Are you aware of anyone ever having been
- 6 charged for such falsification?
- 7 A. I'm not aware of any, no.
- 8 Q. Are you aware of representing -- the agencies
- 9 representing to the United States Environmental
- 10 Protection Agency that there are such criminal
- 11 penalties which stand behind the enforcement of the
- 12 state's UIC program?
- 13 A. I'm not aware of that.
- 14 Q. All right. Are you aware of any comparable
- 15 requirements, that is to say, requirements comparable
- 16 to those applied to an applicant, which applied to
- 17 parties who come before the commission as protestants,
- 18 whether they're obligated to tell the truth or subject
- 19 to any particular penalties for misrepresenting
- 20 environmental conditions?
- 21 A. I would expect that if there are such
- 22 penalties, they would apply equally.
- 23 Q. You're not aware of any --
- A. I'm not aware of any, no.
- 25 Q. If a permit -- if a protestant actually held

- 1 no permit from the agency, it would be fair to say,
- 2 then, that he certainty had no permit exposure to the
- 3 agency; isn't that correct?
- 4 A. That's correct.
- 5 Q. Regarding the additional baseline numbers
- 6 that were provided to the agency by URI, wouldn't you
- 7 agree with me that these numbers were baseline data
- 8 which URI submitted because -- or were available --
- 9 became available because URI had drilled and then
- 10 produced from well fields 9 and 10 of PAA3?
- 11 A. What do you mean by drilled and produced?
- 12 Q. Well, isn't it a fact that the only reason
- there were additional data offered to the agency by
- 14 way of baseline data is that URI was in possession of
- 15 additional data by virtue of having drilled in PAA3?
- 16 A. That's correct.
- 17 Q. And would the agency have preferred that URI
- 18 provide these data or have withheld these data?
- 19 A. As I said, I think the more data we have, the
- 20 better characterization.
- Q. Okay. If URI were a smart miner, would URI
- 22 have drilled these wells as close to the ore as
- 23 possible?
- A. I suspect they would, yes.
- 25 Q. And hence, would you expect that if URI were

- 1 a smart miner, these wells might have significantly
- 2 better uranium values than the baseline wells drilled
- 3 randomly around the site earlier or in the monitor
- 4 well ring?
- 5 A. Well, they would certainly be higher than the
- 6 monitor well ring. That -- that should be outside of
- 7 the ore body. I always thought that baseline wells
- 8 should be drilled in the ore body.
- 9 Q. Then, isn't it true that you would expect
- 10 that if a miner was worth his salt and had information
- 11 as to -- that came from wells drilled into the ore
- 12 body that they would reflect water conditions in the
- 13 ore body?
- 14 A. Yes.
- 15 Q. Your testimony includes a statement something
- 16 to the effect that the result of the use of these
- 17 additional data in calculating restoration values
- 18 resulted in a lesser degree of or less protection to
- 19 water quality. Do you recall the statement something
- 20 of that -- to that effect?
- 21 A. Yes.
- 22 O. Wouldn't it be more accurate and more fair to
- 23 say that these data provided by URI represent --
- 24 presented -- excuse me -- resulted in a more accurate
- 25 representation of water quality within the production

- 1 area?
- 2 A. I think both statements could be true.
- 3 Q. And isn't it also true, then, that,
- 4 therefore, the resulting restoration values were more
- 5 indicative of premining values than they would have
- 6 been without these additional samples?
- 7 A. That was my opinion, yes.
- 8 Q. And, therefore, the result of submitting
- 9 these values, if it resulted in lower or more tolerant
- 10 or lenient standards for restoration, were not
- 11 provided for that purpose or used for that purpose,
- 12 but rather, incidentally, resulted in lower values or
- 13 more lenient values?
- 14 A. That sounds reasonable, yes.
- 15 O. Doesn't -- don't the values that were
- 16 actually reported for uranium indicate that the water
- in the mine zone was, in fact, not suitable to meet
- 18 USEPA drinking water standards?
- 19 A. I -- I don't recall what the drinking water
- 20 standard for uranium --
- 21 Q. Let me ask you to assume that the drinking
- 22 water standard is 30 milligrams per liter.
- 23 A. Okay.
- Q. Now, with that assumption, which we'll have
- 25 to validate some other way -- with that assumption and

- 1 on that assumption, can you tell me whether the water
- 2 quality values in the mine zone that were reported to
- 3 you in the additional 16 or 35 wells, depending upon
- 4 which count you take, showed ore that was -- showed
- 5 water that would not meet USEPA drinking water
- 6 standards prior to mining?
- 7 A. Uh-huh. Yes, that's correct.
- 8 O. Let me correct -- I've been advised I
- 9 misspoke. I want you to assume that the USEPA
- 10 standard was 30 micrograms --
- 11 A. Oh, I thought --
- 12 Q. -- per liter.
- 13 A. Okay. That's what I heard you say. I'm
- 14 sorry. So 30 micrograms would be the drinking water
- 15 limit, and in micrograms 338 would be what we have in
- 16 the restoration table. Is that what you mean?
- 17 Q. Well, you're telling me that the number --
- 18 the numbers you're looking at include a 338 micrograms
- 19 per liter, which is in excess of ten times the value
- 20 permissible by USEPA for drinking water?
- 21 A. Yes.
- Q. Are there any values for uranium taken from
- 23 water samples drawn from the mine zone, these
- 24 additional wells that you were presented, which
- 25 reflect -- which meet or -- or show water better than

- 1 required for USEPA drinking water standards?
- 2 A. I'd have to look at the -- the summary table.
- 3 O. Please do.
- 4 A. So on the -- in the production area, the
- 5 summary table, the low value for uranium would be 19
- 6 in micrograms. So that sounds like that's below the
- 7 limit of drinking water.
- 8 Q. Taken from the production zone?
- 9 A. From the production area, yes.
- 10 Q. All right.
- 11 A. And --
- 12 O. What was the radium value?
- 13 A. I'm still talking about the low radium value,
- 14 would be 0.3.
- 15 O. Look now at the production area wells and
- 16 tell me what you see relative -- with regard to
- 17 uranium values above or below the USEPA limit for
- 18 drinking water.
- 19 A. I'm -- I don't understand what you mean.
- 20 Just look at the production area.
- Q. Okay. Are there any other wells in the area?
- 22 A. I'm looking at the average table.
- 23 Q. Oh, I'm -- I'm talking about the individual
- 24 well.
- 25 A. I -- I don't have the data on --

- 1 Q. You don't those with you? All right. You
- 2 testified, I believe, to the effect that it now takes
- 3 approximately one to one and a half years to get a
- 4 production area authorization; is that correct?
- 5 A. I think that would be the average, yes.
- 6 Q. Would the average four or five years ago have
- 7 been closer to six to nine months?
- 8 A. I was talking about the whole process,
- 9 including issuing the -- issuing the PAA.
- 10 Q. In 1997 when the first -- URI filed its first
- 11 application for authorization No. 3 -- production area
- 12 authorization No. 3, wouldn't it have taken only six
- months or so to get a production area authorization?
- 14 A. I think that could be possible if there were
- 15 no problems involved in it.
- 16 Q. The period of time required has grown longer
- 17 with the passage of time, hasn't it, the average
- 18 period required?
- 19 A. I think so, yes.
- Q. Were your -- the number -- or was the number
- 21 of your contacts with URI during the pendency of their
- 22 application for production area authorization No. 3
- 23 increased by virtue of the fact that this was an
- 24 unusual condition in which mining had commenced
- 25 lawfully under a production area authorization and

- 1 then been interrupted?
- 2 A. Yes.
- 3 Q. Wouldn't it be fair to say that that called
- 4 upon you to confront a number of novel questions and
- 5 answer a number of questions of a bureaucratic nature
- 6 about how to handle the application?
- 7 A. I'm afraid I can't recall what questions came
- 8 up at that time.
- 9 Q. For example, questions as to whether to use
- 10 data from wells which had been drilled for extraction.
- 11 A. Oh, that's true, yes.
- 12 Q. And if so, which of the wells to use. In
- 13 this instance, whether to use all of the data provided
- or only those from well field No. 9 or only those from
- 15 well field No. 10. And if so, why?
- 16 A. Yes.
- 17 Q. Weren't those novel questions?
- 18 A. Yes, that's true.
- 19 Q. Did they have easy answers?
- 20 A. It did require thinking about it some, yes.
- 21 Q. All right. Is there any technical guidance
- 22 that would help an applicant to anticipate the
- 23 problems that URI confronted during this extended
- 24 process for presentation of production area
- 25 authorization No. 3?

- 1 A. If you mean after the application was
- 2 remounted back to the ED, I don't think there would
- 3 be, no.
- 4 Q. Does the program -- meaning persons working
- 5 in your -- in your office -- prefer an applicant to
- 6 maintain close contact to provide information and
- 7 answer questions or prefer an applicant to keep its
- 8 distance and respond by formal communications?
- 9 A. We -- we try to keep contact with the
- 10 applicants, yeah.
- 11 Q. Didn't you confer in this instance with URI,
- 12 for example, to address the issue of how best to
- 13 locate the overlying monitor wells for PAA3?
- 14 A. Yes, I did.
- 15 Q. Didn't that require the exercise of
- 16 geological and/or engineering judgment on the part of
- 17 the agency and on the part of URI?
- 18 A. Yes.
- 19 Q. Are you satisfied that the result of that
- 20 conference was a solution which satisfies sound
- 21 engineering or geological judgment as to the best
- 22 placement of monitor wells to ensure protection of
- 23 drinking water?
- 24 A. Yes.
- 25 Q. I take it that in finding the application for

- 1 PAA3 administratively complete even more than once in
- 2 this case, the agency has announced that the
- 3 application was sufficiently complete and sufficiently
- 4 detailed that it could evaluate the merits of the
- 5 matter on the basis of the information provided; isn't
- 6 that correct?
- 7 A. Yes, I think so.
- 8 Q. In fact, if the agency believes that it
- 9 doesn't have enough information to evaluate an
- 10 application or not enough information to come to a
- 11 conclusion, wouldn't its proposal be to declare it to
- 12 be administratively incomplete awaiting the provision
- of necessary information in order to make a decision?
- 14 A. Well, if -- as far as the technical report
- 15 goes, it's -- it's common to request -- find things
- 16 missing from technical reports during the technical
- 17 review that we don't look at as far as
- 18 administratively complete review.
- 19 Q. You have seen the additional documentation
- 20 which was provided by URI in this instance even as
- 21 late as its rebuttal testimony in this proceeding,
- 22 haven't you?
- 23 A. Yes.
- Q. Would you agree with me that the information
- 25 which was provided before that additional information

- 1 was still sufficient upon which -- information upon
- 2 which to make a sound decision, technical decision on
- 3 the application?
- A. If I'm -- if I understand, you mean the
- 5 misnumbering -- misnaming some of the well data?
- 6 Q. Yes. All of those items that became the
- 7 subject of a later -- of later pages being added or
- 8 changed, I'm asking -- I'm asking you, absent those
- 9 didn't you already have enough information to know the
- 10 technical -- to be able to analyze the technical
- 11 merits of the application?
- 12 A. Yes. I don't think any of those were
- 13 significant areas.
- 14 Q. Did you welcome or -- the submission of the
- 15 additional information for purposes of clarity, or
- 16 would you have preferred it not have been filed?
- MS. OBERLIN: Objection, your Honor.
- 18 Mr. Hill here is attempting to elicit some testimony
- 19 about rebuttal evidence which hasn't been admitted
- 20 into the record yet and for which protestants have an
- 21 objection about, which we will raise at the time that
- 22 those are offered. So if he could limit his testimony
- 23 to avoid these matters, that's my request.
- MR. HILL: The witness has already
- 25 testified on this point, and the question of the data

- 1 or the adequacy of the data or the effect of
- 2 additional data that were provided first through
- 3 additional wells has already been put on the table.
- If the witness is going to stay and we
- 5 can question him later, fine, but I think this is well
- 6 within the scope of both what was being discussed and
- 7 what this witness presented. And we have not
- 8 reoffered our rebuttal testimony nor even offered it
- 9 at this point.
- 10 THE COURT: Go ahead.
- MS. OBERLIN: I may have misunderstood
- 12 Mr. Hill's questions. I thought he was asking about
- 13 additional documentation that has been provided even
- 14 as late as the prefiled rebuttal testimony in this
- 15 case. Whereas before I thought we were talking about
- documents that were historically updated at the
- 17 commission, information that was provided during the
- 18 application process that is completely different and
- 19 separate from what's included in the rebuttal prefiled
- 20 testimony of some of the URI witnesses.
- 21 THE COURT: And your questions had to do
- 22 with insufficiency of the application?
- MR. HILL: Your Honor, they did. I
- 24 asked first whether the application was -- was
- 25 sufficient to be technically reviewable prior to those

- 1 data being provided. And then, second, I asked the
- 2 witness whether the agency would prefer, as in this
- 3 instance where corrections were thought to be
- 4 appropriate -- prefer that such matters be submitted
- 5 rather than withheld from the agency. I have not
- 6 raised the question yet as to anything else.
- 7 THE COURT: Okay. I'm prepared to rule.
- 8 Your -- although your concerns are well-taken, I -- I
- 9 think that it's appropriate and permissible for this
- 10 witness to talk about data that is desirable, whether
- 11 or not the application is sufficient.
- 12 And the reason that I -- I'm not
- 13 troubled by this line of questioning or his -- the
- 14 answers that he's giving, frankly, has to do with sort
- of internal affairs of his review of this information.
- 16 Were we to go to the data itself, then I'd say you'd
- 17 be squarely --
- MS. OBERLIN: Okay. Thank you, your
- 19 Honor.
- THE COURT: And we'll -- I'm sure we'll
- 21 take up that issue within the next day or two.
- MS. OBERLIN: Thank you.
- THE COURT: So, Mr. Hill, please
- 24 proceed.
- MR. HILL: Let me take a moment to

- 1 review my notes. I think I may be -- have finished.
- 2 Q. (By Mr. Hill) You were -- you were asked on
- 3 cross-examination about the commission's practices
- 4 or -- with regard to the amendment of restoration
- 5 tables pursuant to the terms of Chapter 331. Perhaps
- 6 it's Section 104 or 107.
- 7 A. You asked me which section?
- 8 Q. No. I'm just asking do you recall being
- 9 asked about amend -- amending restoration tables. And
- 10 I believe it's under one or two of those sections.
- 11 A. Yes.
- 12 Q. I don't recall immediately. Do you recall
- 13 that in the pertinent provision of rules, there are
- 14 seven, eight, or nine considerations that the
- 15 commission has set out in advance that it will
- 16 consider in such cases?
- 17 A. Yes, I do.
- 18 Q. Okay. I'm not going to ask you for them, but
- 19 I wanted to ask whether the commission -- you
- 20 understand that the commission exercises a public
- 21 policy interest or has a public policy interest in
- 22 whether or not -- in the amendment of restoration
- 23 tables by virtue of the need to conserve water or
- 24 power?
- 25 A. Yes.

- 1 Q. Isn't it possible that in the conduct of
- 2 restoration a miner who is restoring the groundwater
- 3 in an area may discover that groundwater values
- 4 stabilize for some ion that's on his restoration
- 5 table -- we'll say sodium or some other -- stabilizes
- 6 at a number which is not identical or not within the
- 7 restoration table values but which is within drinking
- 8 water values, and there is no reasonable prospect that
- 9 it can be reduced any further?
- 10 A. Yes.
- 11 Q. Is there any public policy that you're aware
- of served by requiring an applicant or a permittee who
- 13 has reached stability -- strike that.
- 14 What is -- what is the significance of a
- 15 miner having reached stability with respect to a
- 16 constituent or a property of water in the mine zone or
- in the -- in the area after a restoration effort has
- 18 been made?
- 19 A. My understanding of that is, it reaches a
- 20 certain level and won't go any lower. So continued
- 21 restoration does not bring that constituent to a lower
- 22 value.
- 23 Q. But it may, nonetheless, result in a waste of
- 24 water or electricity as pumping continues; isn't that
- 25 true?

- 1 A. That's one of several things that are
- 2 considered, yes.
- 3 Q. Isn't it true that a successful miner would
- 4 not hope ever to return the property to the original
- 5 values for uranium?
- A. I can't say that it would never be returned,
- 7 but it might take a great deal of resources to -- to
- 8 return it.
- 9 Q. Well, in fact, if the miner is successful,
- 10 will he not have removed a great deal of the uranium
- 11 from the area?
- 12 A. Well, you're talking about -- are you talking
- 13 about in solution or not in solution?
- 14 Q. I'm talking about the -- the average values
- 15 over the mine -- over the production area at
- 16 restoration time.
- 17 A. It may -- the miner removes uranium, but I
- 18 think most of what they remove is -- is uranium that
- is precipitated in the ore body.
- 20 Q. Then let's go to the fate and transport of
- 21 uranium after mining has occurred. Are you familiar
- 22 with the Battelle Northwest laboratory study of the
- 23 fate and transport --
- MS. MANN: Objection. This is so far
- 25 beyond what you -- what you, quote, opened the doors

- 1 to, Judge Keeper, that this is more in the line of
- 2 redirect and -- and --
- 3 THE COURT: Yeah, I am concerned. If
- 4 you can tell me where we're going with the Battelle
- 5 laboratory study and -- and how that relates to --
- 6 MR. HILL: Yes, your Honor.
- 7 THE COURT: -- transportation.
- MR. HILL: Yes, your Honor. The
- 9 Battelle Northwest laboratory study on fate and --
- 10 fate and transport is a study performed by the United
- 11 States government or through one of its laboratories
- of natural attenuation which occurs in aquifers after
- in situ leach mining has occurred and which
- 14 demonstrates -- I'll anticipate here it is part of the
- 15 basis for the commission's finding in 1989 that
- 16 uranium left after mining will not travel far from the
- 17 site. May travel only meters in a thousand years or
- 18 more because it will be attenuated by interaction with
- 19 other ions in the aquifer or other matrix rock.
- 20 And that being the fact, even if no
- 21 restoration were actively undertaken, the natural
- 22 effect in the ore zone is for uranium which is
- 23 suspended in mining operations to be reabsorbed by the
- 24 postrock and go nowhere.
- I thought this geologist might be

- 1 familiar with the Battelle study since it's
- 2 well-known, I believe, in uranium mining circles. And
- 3 I thought this would assist in clarifying the issues
- 4 raised about the effect on restoration values of the
- 5 additional -- the additional wells that were provided,
- 6 concerns about the transport of ions off-site after
- 7 mining had been completed or when restoration might
- 8 have been interrupted.
- 9 THE COURT: Okay. Why don't we first
- 10 get to the question of the witness's -- are you
- 11 familiar with the study?
- 12 A. I'm not familiar with it.
- MR. HILL: That's it.
- 14 (Discussion off the record)
- 15 (Recess from 4:27 p.m. to 4:31 p.m.)
- 16 Q. (By Mr. Hill) You were asked if you recall
- on cross-examination, weren't you, about the unusual
- 18 circumstance of halted production within a PAA?
- 19 A. Yes.
- Q. Okay. Is there any harm in a halt in
- 21 production in a PAA situated more or less as is PAA3
- 22 for a period of three, even five years or so?
- 23 A. If you mean as far as protecting groundwater
- 24 as long as all the other requirements were met, there
- 25 would be.

- 1 Q. Other requirements meaning bleed either by
- 2 continuous or batch method?
- 3 A. Maintaining the low pressure in the
- 4 production area relatively -- relative low pressure
- 5 in -- in the middle of the production areas, you know.
- 6 Q. Is that relative low pressure a cone of
- 7 influence which points the other way downward and --
- 8 with the point down instead of the point up as in
- 9 injection wells?
- 10 A. I'm -- I'm not sure I'd call it a cone of
- 11 influence.
- 12 Q. Well, when you maintain a sink?
- 13 A. That's what I'm talking about, maintaining a
- 14 lower pressure and injection area relative to the
- 15 pressure --
- 16 Q. All right. And that can be maintained either
- 17 continuously or by batch pumping?
- 18 A. I -- my opinion is as long as it's
- 19 maintaining a low pressure, the method is not that
- 20 important.
- 21 Q. Thank you. Isn't it true that leaching
- 22 solution may be removed from the mine zone at other
- 23 times than after or during -- other times than during
- 24 restoration?
- MS. MANN: I'm going to object again.

- 1 We are so far off of what the -- Judge Keeper had
- 2 reopened, any issues he may or may not have reopened
- 3 that --
- 4 THE COURT: On this one I don't believe
- 5 I asked any questions about leaching solutions, so
- 6 I'll --
- 7 MR. HILL: All right. I am actually
- 8 working from the chemistry of the mine zone that was
- 9 opened in a line of questions, but I'll leave it
- 10 there.
- 11 THE COURT: Okay.
- MR. HILL: I'll pass the witness.
- MS. MANN: Yeah. I'll pass the witness
- 14 as well.
- THE COURT: Any other questions?
- 16 MR. REDMOND: We have no further
- 17 questions and -- of this witness.
- 18 THE COURT: Thank you very much for your
- 19 testimony today. You're excused and thanked.
- THE WITNESS: Okay.
- 21 THE COURT: If you'd like to remain for
- 22 the balance of our proceedings, you are more than
- 23 welcome.
- 24 THE COURT: Why don't we go off the
- 25 record.

- 1 (Recess from 4:34 p.m. to 4:40 p.m.)
- THE COURT: And, Mr. Redmond, where do
- 3 things stand?
- 4 MR. REDMOND: We conclude our direct
- 5 case, and the Executive Director rests.
- 6 THE COURT: Thank you very much. So it
- 7 is my understanding, then, that the respective
- 8 portions of the cases in direct of each of the parties
- 9 have now been presented in full and that all that
- 10 remains for us to address are the rebuttal witnesses
- 11 and their testimony and their evidence that will be
- 12 offered by the applicant.
- So, Mr. Hill, can you correct me or
- 14 provide any additional information on that point?
- MR. HILL: We have remaining evidentiary
- offers with regard to 23-A, the offer, and we have an
- 17 offer yet to be made on 23-A which was tendered by --
- THE COURT: Yes.
- MR. HILL: -- by Mr. Demuth because he
- 20 sponsored Chapters 5 through 11, and that is in his
- 21 prefile testimony. Then we have Mr. Pelizza, and he
- 22 will then -- on rebuttal he will then sponsor -- well,
- 23 Mr. -- let me try that again.
- Mr. Grant will testify first. That will
- 25 be short, might even be stipulated to or agreed to in

- 1 some fashion. Then Mike Russell, Mr. Russell, will
- 2 testify as a geologist and present a good deal of
- 3 documentation that will -- that has been the subject
- 4 already of controversy.
- 5 Then Mr. Pelizza will testify. Russell
- 6 will sponsor his documents, which are -- which is a
- 7 stack. Then Mr. Pelizza will sponsor in full the
- 8 applications, 20 and 23-A and B and in 22 PAA
- 9 application and the deep well applications.
- 10 And then it'll go -- just be a --
- 11 remaining business of collecting whatever exhibits may
- 12 remain outstanding.
- 13 THE COURT: Okay. Are there any
- 14 responses by the parties or any additional information
- 15 that you'd like to provide before we conclude for the
- 16 day?
- MS. OBERLIN: (Moving head side to side)
- 18 THE COURT: Okay. And tomorrow we will
- 19 hear from Mr. Valdivia with his brief or legal
- 20 information regarding the rebuttal information.
- 21 MS. OBERLIN: And also the -- I guess he
- 22 was doing his homework today about another matter, I'm
- 23 sure you-all will take up tomorrow.
- THE COURT: Okay. And last but not
- least, the issue of the map, the consolidated map.

- 1 And my understanding is, is that there has been sort
- 2 of a base version of it created, and it will be
- 3 reviewed with Mr. Saenz and other protestants so that
- 4 we can get a consolidated representation of the area.
- 5 MS. OBERLIN: Yeah. What time would you
- 6 like to start tomorrow morning?
- 7 THE COURT: My inclination is to begin
- 8 no later than nine o'clock tomorrow morning. Are
- 9 there any proposals for an earlier start time?
- MR. HILL: Only so early as necessary as
- 11 to finish Friday, whatever that hour may be.
- 12 THE COURT: I would concur.
- MS. OBERLIN: Let's try for nine, and
- 14 maybe Mr. Hill can try harder to get here on time.
- THE COURT: With that --
- MR. REDMOND: Can we agree to --
- MR. HILL: We may call, based on the
- 18 challenge -- depending upon what Mr. Valdivia brings,
- 19 we may call an additional witness. I may bring a
- 20 registered professional engineer who will testify.
- 21 THE COURT: All right.
- MR. HILL: And we will have the sealing
- 23 the -- the applicant proposes for Mr. Pelizza to apply
- 24 his professional geo -- geoscientist seal to both
- 25 applications, which although submitted at -- properly

- 1 signed before the law passed which -- or the rule
- 2 passed which required otherwise.
- Now we've moved into an age when another
- 4 requirement applies, and Mr. Pelizza will so seal the
- 5 documents to seal any -- any arguments that somehow or
- 6 another should have this marked but doesn't.
- 7 THE COURT: Okay. Now, then,
- 8 Mr. Redmond.
- 9 MR. REDMOND: Yes. If we believe that
- 10 there's a possibility that we can conclude sometime
- 11 tomorrow, I was wondering if we could agree to make
- 12 arrangements where we could work a little bit later
- into Friday evening so that we don't incur expenses to
- 14 come back over the weekend or spend the weekend --
- 15 THE COURT: Certainly. And -- and we
- 16 will deal with those as they arise tomorrow. I will
- 17 alert counsel that I will be more aggressive than in
- 18 the past about trying to move us along in light of
- 19 that.
- MS. OBERLIN: Okay.
- 21 THE COURT: We are adjourned for the
- 22 day. Thank you very much.
- 23 (The hearing was adjourned at 4:47 p.m.)

24

25

Page 168

```
THE STATE OF TEXAS
 1
 2
     COUNTY OF NUECES
 3
              I, Isabel Connor, Certified Shorthand
 4
     Reporter in and for the State of Texas, do hereby
 5
     certify that the above and foregoing contains a true
 6
     and correct transcription of all portions of evidence
     and other proceedings requested in writing by counsel
     for the parties to be included in this volume of the
 9
     Reporter's Record, in the above-styled and numbered
10
     cause, all of which occurred in open court or in
11
     chambers and were reported by me.
12
              I further certify that this Reporter's Record
13
     of the proceedings truly and correctly reflects the
14
     exhibits, if any, admitted by the respective parties.
15
              WITNESS MY OFFICIAL HAND this the 15th day of
16
     August 2005.
17
18
19
                               ISABEL CONNOR, Texas CSR 5006
                               Expiration Date:
                                                  12/31/06
20
                               BOSCAMP & ASSOCIATES
                               Registration No. 302
21
                               111 North Odem, Suite 3
                               Sinton, Texas
                                              78387
22
                               (361) 364-0600
23
24
25
```